AMERICAN
Cinematographer
☆ THE MOTION PICTURE CAMERA MAGAZINE ☆
25¢
FOREIGN 35c

In This Issue . . .

Fighting Cameramen

February
1944

A wink tells the story

HOW Du Pont raw film stands up during the period between manufacture and exposure is determined by aging tests which are conducted at the Du Pont Research and Control Laboratories.

Here we see laboratory assistants operating a Stroboscopic Photo-electric Densitometer. It simplifies and automatically improves the accuracy of density measurements used in determining speed and contrast

An electric eye controls the winking of a stroboscopic lamp which is used to show the density readings on a calibrated disk revolving at high speed. The disk appears to be standing still because each flash of the lamp lasts only 1/4,000,000th of a second! Speed of the procedure is limited only by the operator's ability to note the readings

In this manner, sensitometric properties of Du Pont "Superior" Motion Picture Film are constantly checked to assure dependable uniformity

E. I. du Pont de Nemours & Co (Inc.), Photo Products Department, Wilmington 98, Delaware.

In New York Empire State Bldg

In Hollywood Smith & Aller, Ltd

DU PONT MOTION PICTURE FILM

Patterson Screen Division

DU PONT

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

Film Products Division

No fancy equipment here on the Salween front. Only battle—and a rugged Eyemo in the hands of Wong, famed Chinese news cameraman. Result—excellent battle films of the Burmese campaign

EYEMO'S WAR BEGAN YEARS AGO

PEARL HARBOR was only a way point in Eyemo's war . . . for ever since the end of World War I, Eyemo cameras have been recording border incidents, skirmishes, minor revolutions, political upheavals . . . in a continuous history of events that paved the way for World War II.

All over the world, cameramen filming this history have learned by everyday experience that Eyemo has the sort of rugged practicality that *gets* the picture. They know that spot news happens *only once* and you can't afford to *miss*.

That's why *most* of the newsreel history you see is Eyemo-filmed. Next time you see a war newsreel, note its technical excellence . . . then imagine the difficulties under which the cameraman must have worked.

Then you'll realize why Eyemo is the first choice of seasoned cameramen on battle fronts . . . in bombers . . . on fighting ships . . . and in the news capitals of the world. Bell & Howell Company, Chicago, New York, Hollywood, Washington, D.C., London. *Established 1907.*

A PROMISE TO EVERYONE WHO'S WAITING TO BUY POSTWAR FILM EQUIPMENT

The new cameras and projectors that Bell & Howell will produce after Victory will *not* be hurriedly assembled from left over parts. They'll be improved by the discoveries we have made in producing secret devices for the armed forces. You'll buy them and *use* them with the same pleasure and confidence you've always had in Bell & Howell equipment.

HELP US PLAN THE FUTURE OF OPTI-ONICS

We want engineers experienced in electronic and mechanical design to help us explore the peacetime possibilities of OPTI ONICS. It's a big job—and we're looking for topflight men. If you're one, write us your story, and send a photo. **Address Chairman, Opti-onics Development, 7100 McCormick Road Chicago 45, Illinois**

Products combining the sciences of OPTics • electrONics • mechanICS

PRECISION-MADE BY *Bell & Howell*

Opti-onics is OPTics. electrONics . . . mechanICS. It is research and engineering by Bell & Howell in these three related sciences to accomplish many things never before obtainable. Today, Opti-onics is a WEAPON. Tomorrow, it will be a SERVANT . . . to work, protect, educate and entertain.

Buy MORE War Bonds

AMERICAN CINEMATOGRAPHER

THE MOTION PICTURE CAMERA MAGAZINE

VOL. 25 FEBRUARY, 1944 NO. 2

CONTENTS

In There Pixing (Cartoon) ..... By GLENN R KERSHNER 42

Through the Editor's Finder 43

Fighting Cameramen ..... By ALVIN WYCKOFF, D.Sc., A.S.C. 44

Aces of the Camera ..... By W G CAMPBELL BOSCO 46

Acquiring Balance in Color ..... By F M HIRST 47

What It Takes to Be a Cameraman ..... By PHIL TANNURA, A.S.C. 48

Scenario for Interior Lighting ..... By CLAUDE W CADARETTE 49

The Post-War Visual Education Potentialites in Latin America ..... By NATHAN D. GOLDEN 51

Conserve Your Photofloods With Home-Made Dimmer ..... By JAMES R OSWALD 56

Among the Movie Clubs 60

The Front Cover

As this issue of the Cinematographer goes to press voting has begun in the 16th Annual Awards of Merit of the Academy of Motion Picture Arts and Sciences Academy technical committees are spending their nights viewing films to decide the best achievements in cinematography film editing, special effects, sound recording, art direction. In other fields, such as acting, directing, writing and best production, more than 4000 persons are voting in the nominations So, with "Oscar" the main topic of conversation, we have placed a composite picture of eleven "Oscars," by Herbert P. Bond, upon the cover.

The Staff

EDITOR
Hal Hall

TECHNICAL EDITOR
Emery Huse, A.S.C.

ASSOCIATE EDITOR
Edward Pyle, Jr.

WASHINGTON STAFF CORRESPONDENT
Reed N. Haythorne, A.S.C

MILITARY ADVISOR
Col. Nathan Levinson

STAFF PHOTOGRAPHER
Pat Clark

ARTIST
Alice Van Norman

CIRCULATION
Marguerite Duerr

ADVISORY EDITORIAL BOARD
Fred W. Jackman, A. S. C.
Victor Milner, A. S. C.
James Van Trees, A. S. C.
Farciot Edouart, A. S. C.
Fred Gage, A. S. C.
Dr. J. S. Watson, A. S. C.
Dr. L. A. Jones, A. S. C.
Dr. C. E. K. Mees, A. S. C.
Dr. W. B. Rayton, A. S. C.
Dr. Herbert Meyer, A. S. C.
Dr. V. B. Sease, A. S. C.

AUSTRALIAN REPRESENTATIVE
McGill's, 179 Elizabeth Street, Melbourne, Australian and New Zealand Agents

Published monthly by A. S. C. Agency, Inc. Editorial and business offices: 1782 North Orange Drive Hollywood (Los Angeles, 28), California Telephone: GRanite 2139

Established 1920 Advertising rates on application Subscriptions: United States and Pan American Union, $2.50 per year, Canada, $2.75 per year; Foreign $3.50 Single copies, 25c, back numbers 35c, foreign, single copies 35c, back numbers 40c Copyright 1943 by A. S. C. Agency, Inc

Entered as second-class matter Nov 18, 1937, at the postoffice at Los Angeles California, under the act of March 3, 1879

"Mother, is **ADEL** *a soldier like Dad?"*

Yes, indeed! ADEL flies with Army—Navy—Marines—all three! Every time Dad takes up a plane he depends on ADEL to help complete his mission and return safely. Hydraulic valves, electric anti-icing systems, line supports—these are strange things to you, but to fighting pilots like Dad, ADEL is famous for building them with great precision, care, and safety.

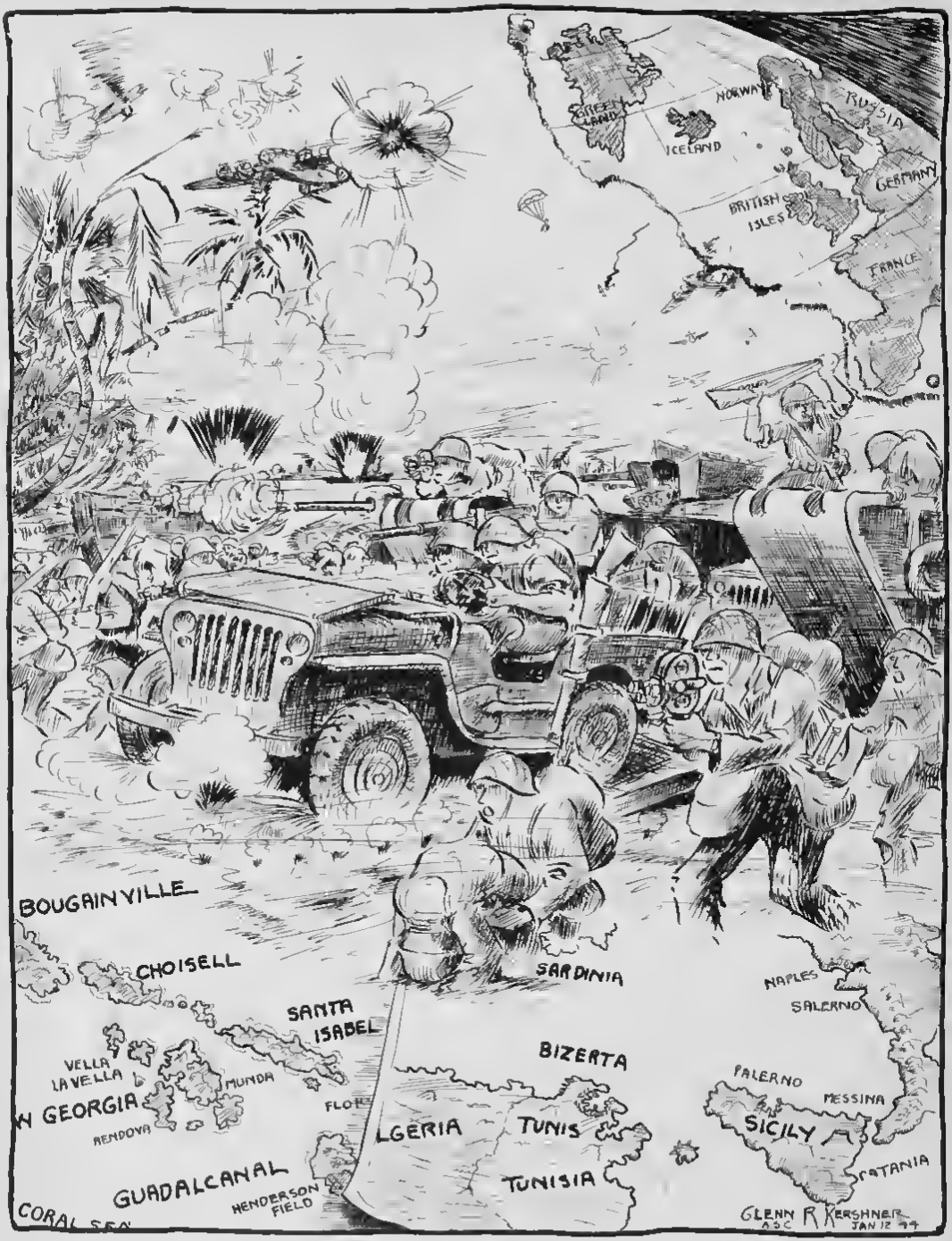
ADEL valves raise and lower landing gear, rotate machine gun turrets, open and close bomb bay doors and perform other functions essential to flight and combat service.

ADEL originally planned to make cinematographic equipment However, a unique lens focusing device became a carburetor dual control which, in turn, led to development of other aircraft products. ADEL'S peacetime plans include advanced cinematographic equipment, made with the engineering skills that created ADEL'S international aviation acceptance.

ADEL

* * FOR WAR (AND PEACE) BUY BONDS * *

ADEL PRECISION PRODUCTS CORP.
BURBANK, CALIF., HUNTINGTON, W VA.
Seattle, Wash. · Detroit, Mich. | Hagerstown, Md.



IN THERE PIXING

THROUGH the EDITOR'S FINDER

ON the opposite page is a cartoon drawn by Glenn R Kerschner, A S C., which tells more about the cameraman under fire than can a thousand words It is well worth anyone's while to spend a little time studying it, for it will give the reader a comprehensive idea of what our combat cameramen are doing, and where

At every front cameramen in uniform are advancing side by side with the fighting men filming the steady advances of our forces and recording history in the making. There is a difference between charging into the enemy lines with a gun in your hand than charging with nothing but a camera with which to shoot It takes courage to stand in the midst of bursting shells and efficiently operate a motion picture camera Many of these combat cameramen are dying Sure, but for everyone that dies two more are ready to take their places

On land, on sea, in the air, the cameramen are filming a pictorial history of this world-wide struggle which has never been equalled before Many of them are from Hollywood Many of them are members of the American Society of Cinematographers. men whose only contact with war was in filming phoney war scenes for a Hollywood feature picture There are other cameramen, too Men who have never operated a camera before Many of these were trained by members of the A S.C here in Hollywood.

If you want a first-hand picture of cameramen under fire read the article in this issue of Alvin Wyckoff about the experience of Jack Mackenzie in filming the battle of Midway, which appears on the next page When you read that article turn back to Kerschner's cartoon and see where else just such bravery is being exhibited by the fighting camera men Then you will realize that these men have real intestinal fortitude

Cameramen from our fighting Allies are doing the same thing with their armies, and in the March issue of the Cinematographer there will appear a special article entitled "Russian Cameramen at the Front" This article was written by Roman Karmen, Cinema-operator Winner of the Stalin Prize, and was sent direct to us by wireless from Moscow It is a moving document by one of Russia's greatest cameramen who, too, is in the front lines with only his camera

"OSCAR" time is just around the corner On the evening of March 2nd the Academy of Motion Picture Arts and Sciences will hold its 16th Annual Presentation of Awards of Merit for outstanding achievements in the creative are of film making It is always a great night in Hollywood, and a greater night for those who receive the coveted statuettes

Winning one of the Awards of the Academy of Motion Picture Arts and Sciences is universally regarded as the highest honor that can be won by any of the creative artists of the film industry That golden statuette, known to the world as "Oscar," indicates that the recipient's fellow craftsmen recognize that he has done the best job of the year in his field

There are many who wonder how the Academy selects the cameraman who wins the award for Black-and-White cinematography and the one for color cinematography Now and then you hear disgruntled individuals remarking that there was unfairness Well, so that the readers of this magazine can know exactly how the Cinematoghaphic Awards are selected we herewith print the exact rules from the Academy's official bulletin outlining the rules for all the more than twenty awards that are given in various fields

SPECIAL RULES FOR THE CINEMATOGRAPHIC AWARDS

Black-and-White Cinematography

(1) The Directors of Photography associated with each studio shall select not more than two black-and-white productions produced by their studio, which production or productions shall be included on a nomination ballot to be sent to all Directors of Photography in the industry.

(2) From those productions selected in accordance with Paragraph (1) above, each Director of Photography shall vote for ten productions in the order of his preference. The ten productions receiving the greatest number of votes shall be considered nominated for the Black-and-White Cinematographic Award This voting shall be by secret ballot, by the preferential system, and shall be governed by the regular Rules applying to this system of voting The ballots shall be tabulated by a Committee to be known as the Cinematographic Awards Tellers Committee to be appointed by the Chairman of the Photographic Section.

(3) In the event that two achievements by one Director of Photography (having a single, not joint, credit on both such achievements) shall receive sufficient votes to be nominated only the one receiving the most nomination votes shall be placed on the final ballot. The nomination votes for the second achievement shall be redistributed and the candidate of the next highest standing included among the nominees.

(4) The one production to receive the Award shall be chosen from the ten nominated productions by a vote of all Directors of Photography in the industry who shall be given an opportunity to view these productions in advance of the voting procedure In the final voting, each Director of Photography shall name only that production which he believes to be the Best Cinematographic Achievement of the Year Ballots shall be sent directly to the Academy Auditors in line with the regular Academy Awards voting procedure

(5) As outlined in Paragraphs (2) and (4), all Directors of Photography in the industry shall be eligible to participate in the nomination and final voting to select the production to receive this Award In order that the list of Directors of Photography shall be complete, individual lists of the Directors of Photography in each studio shall be obtained from the heads of each studio Camera Department and or any other available sources, and shall be checked and approved by the Cinematographic Awards Eligibility Committee to be appointed by the Chairman of the Photographic Section This Committee will be charged with the responsibility of the preparation of a full and complete list of Directors of Photography.

(6) Cartoons shall not be eligible for this Award.

Color Cinematography

(1) The production to receive the Award for Color Cinematography shall be chosen by exactly the same procedure as specified in the Rules above governing the Black-and-White Cinematographic Award, with the exception that only six productions instead of ten shall be nominated for the Color Cinematographic Award.

(2) Cartoons shall not be eligible for this Award

After studying the above rules, it would seem that none can say the Academy is not trying to inject the heighth of fairness into the selection of the two cinematographic prizes.

TEN black and white and six color features have been nominated for photographic Oscars in the coming Academy awards The pictures, their lensers and the lots where made follow

Black and white: "Air Force," James Wong Howe, Elmer Dyer and Charles Marshall, Warners, "Casablanca," Arthur Edeson, Warners; "Corvette K-225," Tony Gaudio, Universal; "Five Graves to Cairo," John Seitz, Paramount, "The Human Comedy," Harry Stradling, MGM, "Madame Curie," Joseph Ruttenberg MGM, "North Star," James Wong Howe, Samuel Goldwyn; "Sahara," Rudy Mate, Columbia, "The Song of Bernadette," Arthur Miller, 20th-Fox, "So Proudly We Hail," Charles Lang, Paramount

Color: "For Whom the Bell Tolls," Ray Rennahan, Paramount, "Heaven Can Wait," Ed Cronjager, 20th-Fox; "Hello, Frisco, Hello," Charles Clark, 20th-Fox, "Lassie Come Home," Len Smith, MGM; "Phantom of the Opera," Hal Mohr, Universal, "Thousands Cheer," George Folsey, MGM

H H

Jack Mackenzie Jr. Photographers Mate First Class all dressed up for inspection. For four days he worked and sweat filming the battle of Midway while the Japs poured everything they had at him and his mates. It is men like Jack who are in the thick of the fight on every front, shooting with film.

Fighting Cameramen

By ALVIN WYCKOFF, D.Sc., A.S.C.

as related by

JACK MACKENZIE JR

As sailors in the Navy go, Jack Mackenzie, Photographer's Mate First Class, looked like the rest rest of them, but—there was a difference. He did his fighting with film instead of bullets. Under fire, with danger poking at him from all sides, he was steady of nerve and alert for the best chance to get a telling picture. About the only worry he had was a disturbance as trivial as any he could experience in the peaceful quiet of his own home. This characteristic was brought out in his remark about the beginning of the battle:

"All of a sudden I was brought to my feet in a daze out of a swell dream. I thought I was back in the studio in Hollywood working on a beautiful picture when I came awake. Hell had broke loose all around and above me. Those little monkey men were blasting with everything they had from machine guns to block-busting bombs.

"The sun was just breaking along the horizon in a beautiful warm glow tinting cloud edges a pale pink under a dome of clear blue sky, and the ocean was as calm as a kitten after a bowl of cream. The beginning of a perfect day for shooting color, and as it turned out, for shooting bullets too. For two weeks, since I had been on the island, every morning had been the same. Perfect atmosphere for color photography. All the year around it's the same out there on that little Pacific island. The grandest place in the whole ocean to find absolute quiet and peace—if that's what you want. Nature rests there in a Paradise of harmony.

"A group of small islands 1800 miles west of Honolulu. The main island is no more than a mile long and only three-quarters of a mile wide with the highest point not over fifty feet above sea level. The only people that have ever lived there as residents were employees of the trans-Pacific cable station, and the trans-Pacific airplane service that was established in 1935. That was the picture before all this trouble happened, before the Japs went loco. On the map of the Pacific Ocean, just a pin-point. I'm talking about Midway Island, where one of the hottest engagements in the early part of this war was pulled off, and it was a grand show.

"For the past two weeks it had been whispered about, that the Japs were going to attack us in force—attack with everything they had, cruisers, battlewagons, airplane carriers, and submarines. It was rumored that they had declared they would clean off the top of the islands, blow 'em apart and sink 'em into the ocean. Flushed with their Pearl Harbor sneak they felt cocky—and believe me, when they started their big attack on Midway, they acted cocky!

"For four days the battle waged over the island and out over the ocean. By the end of the fourth day a lot of damage had been done and a lot of blood had been spilled—and it wasn't all our blood either. We suffered a lot, but the cocky Japs crawled away limping and so crippled that they've never attempted a come-back to disturb that peaceful Midway quiet.

"The battle started about twenty miles out in the ocean where our planes had spotted them coming in. We, on the island thought, as the day wore on, that all the fuss would probably stay out there over the ocean.

"So I could have a good spot to work from, if the battle did get over our way, I clumber up to the top of the powerhouse tower, the highest spot I could work from: it was a nice peaceful spot and from where I could view the entire island unobstructed and far out to sea. My B and H Filmo 70 was loaded with Kodachrome and a good supply in my film case. I settled down to waiting, basking in the glorious sunshine. I bunked there that night so as to be on hand in the early morning if anything happened—and it did!

"When I was awakened those playful Japs were streaming in and all our batteries and shore planes were blazing away at them and knocking them around beautifully. Jap planes were falling in flames all over the place even as far out as ten miles I saw one dive into the ocean leaving a long trail of black smoke behind him. It was a beautiful sight.

"Up there on top of the powerhouse tower, and out in the open, I had every advantage to get the pictures I wanted. I got a swell shot of a Jap formation coming straight in toward me. It looked as though it would go over me when they suddenly broke formation for bombing and strafing. Then my film ran out. While I was crouched down reloading one of the planes out of the formation came tearing over the power house looking at me right out there in plain view with nothing to shoot at him but film. But he passed over and I worked fast to get my camera loaded when—WHAM! I was bounced flat on my face by the terrific explosion of a

bomb that had missed the power house by only twenty feet—and I had missed a good picture That's the only thing that hurt me during the whole four days of battle But—I didn't stay there on top of that power house tower to invite that Jap back I didn't have to because he got plugged by one of our batteries and dived on top of the island in flames I didn't lose any time getting down the ladder to the next landing where I wouldn't be out in the open so much, down where I had better shelter, but I had to run around the tower on the outside walk to photograph the rest of the battle action.

"By this time they had riddled the hangars and set them on fire. The hospital too was smashed and on fire, and the commissary was all busted up and burning fierce and one of our oil tanks was on fire sending a plume of heavy black smoke high up into the atmosphere. It was a merry little hell all around.

"From a peaceful little island of restful quiet, Midway had been churned into a mass of debris, noise, and burning installations It was a sorry looking place,

"I guess my rabbit's foot, still snug in my pocket, had warded off from me all the evil danger that had been dished out through those four days

"Lucky for me too that matters had so turned out that I was assigned to duty on the island. At one time I thought I was going to be assigned to General Tinker on his Wake Island attack when Commander Ford intervened and kept me with him Of course I was disappointed, I wanted to make the trip with the General I wanted to get into action Things had been pretty quiet up to that time—too quiet. General Tinker never came back He was lost during the attack No one knows how or what happened. He and his plane have never been heard of since that battle. He was a fine commander was General Tinker, a full blooded Indian with the courage of God. We almost lost Commander Ford too in the Midway action He got a piece of metal in his arm from the bomb that exploded when it missed the power-house. The Commander was photographing action with a little magazine 16mm camera at the time. He didn't miss any shots either up to the time he got hurt

"We lost a lot of our boys in that action out there over the ocean Much of the film that was shot of the sea action was done by Lt. Kenneth Pier with a little 16mm camera you could carry in your coat pocket—and did he do a swell job? His film had a lot to do with the success of the picture that was released to the public He flew with the planes off the Hornet

"After the battle I was kept pretty busy photographing records of the destruction, interrupted only as each rescue squad with wounded and fatigued men who had been adrift in little

Photographers Mate First Class Jack Mackenzie, Jr. talks it over with the crew of a P.T. Boat at Midway. Jack is second on the right facing the crew. They had a lot to talk about after the Japs had passed over

rubber boats were brought in Some of them without boats kept themselves afloat by inflating their life jackets I made records of all of them for Washington.

"I'm here to tell you those men had guts too' They had everything it takes to make a good fighter' Not one of them complained or whimpered or even squirmed when the doctor probed a raw bleeding wound before applying first aid bandages. Some of the men were so exhausted from exposure in the water and sun and lack of food and water to drink that they had to be carried, they cried, not because of any hysteria, but of their weakness, because they didn't have strength enough to carry on by themselves They would plead to let them alone until after the seriously wounded men were taken care of first.

"What hadn't been destroyed of the hospital equipment was quickly set up and put into shape to take care of the men as fast as they were brought in, and I'm telling you those doctors, their assistants and nurses, worked' They never stopped working, day and night, until every man's case had been properly disposed of The most any of those men asked for in their suffering, while the doctors were probing, was a cigarette, or a drink, or a little food.

"With the commissary and our food stores all scrambled up there was little for anybody to eat until relief supplies could arrive from Honolulu via plane Everybody had to go hungry rationed to one sandwich a day.

Above we see young Mackenzie stripped for camera combat duty at Midway. This was the way he was dressed when he stood on top of a power house and filmed the attacking Jap planes as they rained bombs around him

"As the days passed and we got the fires out and the island back in shape, we settled down to a daily routine of easy life once more

"The night before I left for Honolulu to get our film processed, I sat in with a bunch of Marines in a little poker game and won thirty bucks—a sort of Scotch trick, waiting until my last night on the island'

"As for real money in that place you might just as well have a pocket full of seashells, they'd buy just as much as money would That's one place where money has no value, there's nothing to spend it for Nothing it can do for you until you can get back where it circulates—and that's where I was going."

Aces Of The Camera

Leonard Minuse Smith, A.S.C.

By W. G. CAMPBELL BOSCO

WHEN the American Society of Cinematographers elected Leonard Minuse Smith, A.S.C., to be its President, that august body paid a most deserving compliment to one of the more able members of the camera profession and one who is universally appreciated as a "darn good guy." Their confidence was by no means misplaced. No society or association ever had a president of greater integrity or sincerity, or one who had a deeper interest in the welfare of the society or its associates. Len Smith is deeply conscious of this tribute paid him by his fellows. He considers the presidency of the A.S.C. the greatest honor that can be paid a cameraman, and his election to that office the high spot of his career.

Len is one of the Brooklyn Smith which seems to have been inevitable since his family had been hanging around that borough for a lot of generations. In fact his great-great grandfather was the famous Peter Minute, (a name which through the years seems to have become Minuse) Governor of New York State. And as Len reminisces about his early life the story bristles with the names of people and places dear to the heart of every loyal son of Brooklyn.

After getting the fundamentals of his education at P.S. 9, an institution of learning that also counts Clara Bow among its alumni, Len went on to Rutgers. Being a true Brooklynite, he majored in baseball, and, as any true Brooklynite will tell you was inevitable, he was good. In fact he was so good that Jake Daubert, who was the first baseman of the Brooklyn Ball Club in those days, wanted to use his services professionally. But Len was still a minor, and his father said "no!" And he kept saying "no" until Jake and Len cornered him one day in Al Schmidt's Cafe on Fulton Street and, after a scene that would do credit to the imagination of a first-class dramatist, put his permission on the dotted line.

So Len made his bow as a professional baseball player, playing for Newark, N.J., in the International League. That was the year they won the pennant.

So far so good. Everything was O.K. and Len thought life was just a bowl of cherries. He was playing baseball, and getting paid for it. He was a member of a champion team. But, as every true Brooklynite will tell you, anything as far away as New Jersey is a foreign country. Len's ambition was to play on the home team. He almost realized that ambition. Charlie Ebbetts had him signed and sealed, but before he could be delivered he was hit on the arm by a baseball bat. It was a nasty blow that tore ligaments and forced the cancellation of a promising career.

Baseball's loss turned out, eventually, to be motion pictures' gain, although Len's first efforts were humble enough and made no noticeable impression on his contemporaries or improvement in the product. On the other hand, the six dollars per week that Len received for his services, particularly after the comparative munificence he received as a ball player, made no noticeable impression on him. In fact, the only thing that did make this stipend acceptable was that with it went the title of "assistant developer" and the thrill of being connected, however remotely, with that new wonder of the age—the motion picture.

Len's father couldn't see anything in motion pictures. Sure, he agreed, they were quite a novelty. But did they have a future? Father didn't think so. That was why, when Len asked his father to use his influence with his friends, the Messrs. Smith, Blacktour, Rock, owners of the old Vitagraph in Brooklyn, to get him a job in the fascinating new industry he used it to get his son the most unpleasant and, what was worse, most confining job on the lot. Father was sure it would discourage his son. Len should have been discouraged. With the six bucks and the title went some of the most disagreeable tasks. Mopping the floors, taking up and scrubbing the duck-boards and keeping the tanks clean were among them.

You'd think Len would have had enough of water and wetness during his working hours, but he didn't. He was an active member of the Manhattan Beach Swimming Club of Brooklyn. And when a newspaper sponsored an endurance swim from The Battery to Sandy Hook, some 23 miles, Len, having regained the use of his injured arm, promptly became one of the contestants. And he was one of those who finished the gruelling course. Perhaps it was that feat of strength and endurance that prompted Walter Arthur, Vitagraph's head cameraman, to realize that

(Continued on Page 52)

Aquiring Balance In Color

By F. M. HIRST

PICTURE to yourself, if you can, a colorless world—one in which all people and objects are seen in tones of grey "Uninteresting," you say. Yes, I quite agree with you The influence of color in our daily lives is so great that it cannot be ignored We are so accustomed to seeing color all about us that most people take it for granted Not many realize the tremendous effort that is exerted in art and industry to attain the lovely effects that enrich our daily lives Deeper understanding and appreciation of color can come only with close association and keen observation of it Harmonious color is likened to beautiful music, and as discords in music upset our nerves, so do discordant colors

Can the principles of color harmony be successfully applied by the average movie maker? The answer is definitely yes! Do you remember that shot of the autumn foliage—a blaze of yellow and orange against a blue sky? Did the photographer just happen to look up and see it, or did he remember that the combination of gold and blue is true color harmony, and plan his picture that way? Most of us photograph the natural beauty which surrounds us, yet few of us apply the simply fundamentals of color harmony. The beauty of a scene usually impels us to bring the camera to the eye and shoot It is true that many movie-makers will try for a better camera angle to improve composition, but how many try to balance the color in a scene.

When we speak of balance we mean the opposition of light shades against dark shades, small patches of brilliant color against large masses of subdued color, large areas of pastel shades with small areas of bold color. Once we have mastered this art, our pictures become more striking and gain in character.

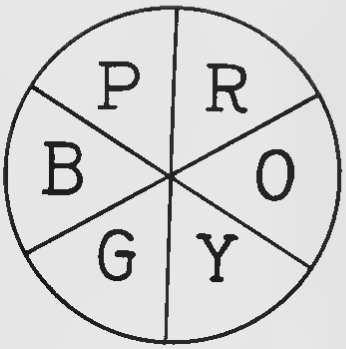
One summer, while traveling through Glacier National Park, we came upon a breath-taking view of Blackfoot Glacier. In the foreground was a deep valley filled with fir trees reflecting many shades of green A few fleecy clouds emphasized the brilliant blue of the sky, blue haze added to the beauty of the distance Here was a scene for which we had always longed, but it lacked warmth. At the base of a steep embankment a bright patch of yellow bear-grass attracted our attention I knew a touch of yellow would add immeasurably to the scene; not only would it supply the needed warmth, but add balance and harmony Descending the bank, I placed the camera so that two or three huge flowers were nicely centered in the lower half of the frame, using the distant glacier as a background. (Incidentally, a meter reading of *f* 6.3 for the scene and *f* 9 for sunlit yellow flowers was quite a worry until I found a cluster of flowers in the shade of a tree This brought the light meter reading of flowers and scene close enough for good exposure.) I shot the scene, and the resulting color scheme of blue and green, balanced by the creamy yellow flowers, more than repaid me for the inconvenience of the difficult climb to join my party. By this time the bus driver was tooting the horn quite vigorously!

We have spoken of yellow and gold harmonizing with blue If brown earth or a boulder had been used in place of the flowers, we would have obtained the same pleasing effect

At St Mary's Lake I had a similar experience Green was the predominating color in this scene Reflections of sun-lit trees on the water tend to turn the lake into a beautiful emerald color What should I use for balance? The sun was shining on the needles of a dead fir tree and they appeared a brilliant russet Here was my color scheme Russet and green are always good color harmony

I would like to add a word of warning about the use of red in average scenes Beware that this accent does not become so over-powering that it detracts rather than adds to your picture To illustrate, let me tell you of another experience While shooting Going-to-the-Sun Chalets across St Mary's Lake, a young lady came by with a red sweater on her arm She consented to pose for me wearing her sweater Placing her about 50 feet from the camera in the lower righthand corner of the frame, she added just a touch of red to the scene If this figure had been placed closer to the camera, the eye would have been attracted to the mass of red rather than to the scene in general

The principle of balancing color may easily be understood by any movie maker if he will think back to the simple color harmonies of his school days Let us refresh our memory by reviewing the colors of the solar spectrum, which are red, orange, yellow, green, blue and purple These are the principal colors seen in a rainbow, or as light rays are decomposed or dispursed by refraction, through a prism Let us describe a circle and divide it into six equal sections Then place the colors of the spectrum in their clock-wise order, and we have



A quick glance shows us that the warm colors—red, orange, and yellow are in one half, and the cold colors, green, blue and purple are in the other half of the circle of hues We also will notice that the complimentary colors are diametrically opposite each other green opposite red, blue opposite orange, and purple opposite yellow. This is why complimentary colors are often referred to as opposite colors. If we remember that complimentary colors are always harmonious, we have the fundamentals of simple color harmony.

Also we will see by our chart that all complimentary colors are contrasting colors, but not all contrasting colors are complimentary colors Contrast may be obtained by combining light and dark shades of the same hue This is very effective in title work It is easier and safer for the amateur to obtain good results by the use of light and dark shades rather than using complimentary colors Our object is to make a title attractive and easy to read, and avoid the mistake of flooding the screen with too much color However, I do not want to give the impression that complimentary colors should not be used, but I do say that care should be taken in their selection Many lovely effects can be produced by the use of one hue high in value and its complimentary hue of low value

I remember seeing a film which had been taken with great care; the exposures were good and it was well sequenced The one jarring note was caused by the wrong use of color in the titles Red title letters had been used on a yellow background paper which represented knotty pine The idea was excellent, for it carried out the rustic feeling of the picture The fault lie in

(Continued on Page 69)

Phil Tannura says a cameraman must be able to combine mood with composition. At left is a good example of that combination

What It Takes To Be A Cameraman

By PHIL TANNURA, A.S.C.

I HAVE been asked, "What does it take to be a cameraman?"

It may be difficult to answer this question in a completely satisfactory manner because to do so would require the consideration of intangibles, such as qualities of temperament, that would not lend themselves to discussion in an article of this kind.

First a cameraman must be an artist. A commercial artist perhaps, but an artist nevertheless. He must have a pictorial mind. Be able to see, in his mind's eye, the effect he would achieve of light, shadow and composition to best suit the mood of the scene he is about to shoot. To properly evaluate the mood of a scene, he must possess a sense of the dramatic, and be able to implement and heighten the work of the actors and the director.

But a cameraman can only make full use of these attributes when he is working with a director who is himself pictorially minded. Such a director is conscious of the contribution a cameraman, with his more specialized knowledge, can make, and, being sympathetic to pictorial values, is receptive to the cameraman's suggestions and point of view.

John Ford springs to my mind at the moment as an outstanding example of a pictorial minded director. His pictures are not just photographed, they are photographed artistically. It has been said that any single frame from one of John Ford's pictures, if blown-up and framed, would possess all the elements of a prize-winning picture. And the success and acclaim that Mr. Ford's pictures have received should be answer enough to those who would argue that a highly pictorial picture all other considerations being equal is not commercial.

Photographically the modern cinematographer becomes commercial by the demands of the motion picture-going public, who want to "see" the stars, and from the commercial consideration that the play is the thing. If one could light every set according to the principals of pictorial perfection, and ignore the necessity of lighting the characters in the story, every scene could be like a painting and every cameraman a real artist.

But a cinematographer does not strive to be a pictorial perfectionist in this sense. The characters in the story, particularly the stars, have to receive lighting preference for story value and commercial reasons. To be too "arty" is to fail in the role of the dramatic entrepreneur, to be too commercial is to violate the artistic canon. The successful cameraman must knew how to balance one against the other.

Despite the fact that both the cameraman and the director assigned to a production are working towards the same end, some directors unwittingly work against their own interests by being at cross purposes with the cameraman by failing to take him into their confidence. Such a condition must reflect itself in the finished product. On the other hand, the perfectly integrated production in which the principals are seen to their best advantage, the director gets most value out of characterization and story, to the accompaniment of the most effective and pictorial photography—is obtained with complete collaboration between director and cameraman. This is not meant to suggest that the cameraman should try to out-direct the director. Only that he can contribute more towards a better end result by exercising fully his responsibilities as director of photography.

Then there are certain stars—who owe their positions in the firmament of the Hollywood heaven, to some extent at least, to the cameraman's skill—who consistently work against their own interests by adopting unorthodox ideas about the manner in which they should be photographed and by demanding that their ideas be carried out. Some stars present problems because of make-up idiosyncrasies. One prominent feminine star insists upon wearing a most unsuitable and dirty looking make-up, which is most detrimental to her glamorous intentions, and which only succeeds in complicating her cameraman's problems as he strives to counteract its effect.

But whatever happens on production the cameraman bears the responsibility of turning out a good "picture." He is judged by the results on the screen. Few people, seeing the picture, will know or care whether the cinematographer credited with the picture was handicapped by an unsympathetic director or a hard-headed star. The cameraman must, however, by the very nature of things work to please the director and the star. But he must also please himself to the extent of doing what he considers to be right, if, for no other reason than to protect himself and his reputation.

Under any circumstances a cameraman works among people who are extroverts and temperamental, frequently under conditions of nervous strain in which temperaments clash. Therefore, in order that he may better, and more quickly get the results he is after, a cameraman must be a psychologist. And, if he would accomplish his end harmoniously, a diplomat too.

(Continued on Page 64)

Scenario For Interior Lighting

By CLAUDE W. CADARETTE

MANY times, amateurs are at a loss during the winter months to do any filming, as the weather conditions do not permit good shooting out of doors. This month I am outlining a scenario that can be filmed indoors with artificial light and the scenes for the most part, may be taken within one house.

Amateurs must use the greatest caution when filming a dramatic scenario in choosing their actors as a tense, dramatic sequence can easily become a comical situation if the characters are not properly directed and tend to over-act or over-emphasize their emotions. Any drama requires capable direction and the skillful use of lighting for the desired key and emotional feeling. This scenario will take considerable thought and special camera effects, but it is not too difficult and will provide many evenings of fun.

"Conscience"

Main Title: "Conscience" lap-dissolves or cut to

Characters: "The girl . .
"The man
"Police Officers

Photography by . .
Fade-out
Fade-in

Long shot. The girl is sitting at a desk writing a letter. She looks up and seems to be thinking of something more to add to the letter.

Cut to a close-up. The girl continues to write and finishes the letter.

Close-up of letter from over her shoulder as she signs her name. The letter reads "your insane jealousy has killed my love for you and I have fallen in love with Charles, Sincerely, Margot."

Medium shot of girl as she folds the letter and the scene fades out as she addresses the envelope. End of first sequence.

Fade-in to a night shot of an automobile coming to a stop at the curbing.

Medium shot of the man alighting from the automobile and walking toward his home.

Close-up of man stopping at the mail box to collect his mail his face registering surprise as he seems to recognize the girl's handwriting. He enters the house.

Shot inside of the house shows man entering and cuts to a close-up of him as he sits into a chair. He opens the girl's letter and reads it. At this point the man shows a stunned expression on his face and clenches the letter in his hand. His facial expressions should depict an uncontrollable temper and jealousy. Direct this action very carefully to give the audience the correct interpretation.

Long shot of the man as he leaves the room with the letter clutched in his hand and opens the front door.

Medium shot of man as he enters car in a hurry to drive to the girl's house. The car pulls out of the scene.

Close-up of man driving in the car with determination. Rock the car somewhat to give the effect of travel. Fade out at this point.

Fade-in to the girl in her house as she arranges a vase of flowers on the piano or table. The vase should be sufficiently large to be used as a weapon.

Long shot of the girl as she sits at the piano to play. Cut to a semi long shot showing the girl playing the piano as she faces the camera. She suddenly looks up in surprise as she sees the man enter the door. She smiles rises to meet him.

Medium shot of the man as he advances toward her. His rage is very evident on his face.

Long shot of man and girl meeting, but he angrily pushes her back. The girl turns her back to him as he flaunts the letter at her.

Close-up of man's face as he talks to the girl and works himself into a temper.

Medium shot of man as he turns the girl around to face him by pulling her arm.

Close-up of man's hand reaching for the vase of flowers and picks it up.

Extreme close-up of girl's face as she covers her face with both hands. This shot should only be a flash and have a length of 4 or 5 frames only.

Close-up of man's arm as it appears to strike blows on the girl's head with the vase.

Long shot of the man and girl at the instant when she slumps to the floor. Her face is terribly bruised.

Medium shot of man as he bends over the girl and realizes that she is dead. He looks at the girl.

Close-up of girl's face. Blood trickles from a cut in her forehead and from her mouth, her eyes remain open and motionless. The blood can be made with chocolate syrup placed on the face before starting if you are using panchromatic film, or a heavy red syrup for Kodachrome.

Medium shot of man from another angle as he stands and backs away from the girl. He slowly leaves her house with a horrified expression. As he closes the door, the scene fades out slowly.

Fade-in to two radio police officers sitting in their car intently listening to their police radio call. They look at each other as they take their message.

Close-up of the police siren whirling.

Close-up of the police officers as they ride. One officer checks over his gun.

Close-up of a door with a number on it similar to a hotel room.

Long shot of the man sitting at a small table, reading newspapers, smoking cigarettes and drinking. He is unshaven, having been in the hotel room hideout for days. A large bottle of whiskey sits on the table. He rubs his hand through his disheveled hair.

Close-up of the man's face, as he holds his head in his hands and is in a horrible mental state. He drinks from the whiskey glass and smokes nervously.

Close-up of ashtray and empty bottle on the table as the man's hand snuffs out the cigarette. The ashtray is filled with burnt cigarettes.

Close-up of the police car siren whirling.

Long shot of the man as he looks out of the side of the drawn window shade. He picks up the newspaper to read again.

Close-up of the police riding in the police car.

Extreme close-up of the man's face as he continues to register fear and anxiety. This shot should run for one minute as it is to be used for double exposure work. This may be accomplished by carefully winding the camera as it is running. Time the scene exactly 60 seconds with a watch and film it at the beginning of a new roll of film so that you may rethread it in the camera at the exact spot for double exposure work. After you have taken the scene continue filming the balance of the scenario and I will tell you of the double exposing later in this article.

Extreme close-up of the siren as it stops whirling.

Extreme close-up of man's face as he lights another cigarette. After he lights it, he quickly turns his head in the direction of the hotel room door, with extreme fear, as he hears footsteps outside.

Long shot of the officers approaching the door with the room number on it. They stop at the door with drawn guns, and knock.

Medium shot of the man as he draws a gun and aims toward the door. He realizes that he is cornered and slowly raises the gun to his head.

Medium shot of the officers as they quickly enter the room and look toward the table.

Medium shot of the man as he lies on the table with a gunshot wound in his temple. Here is where the chocolate syrup comes in handy again.

Close-up of the man's hand with the gun still smoking. Fade-out.

In the long close-up shot of the man's face in which you are to double expose other shots, rethread the camera with the film on which this scene was taken. You have 60 minutes of scene in which

(Continued on Page 63)

It takes the concentrated effort of many people to prepare even an intimate scene for the movies For the players there s no such thing as privacy Above we see Jean Fontaine and Nigel Bruce rehearse a scene for Paramount's Frenchman s Creek All around them are the various members of the crew and the scene looks like a crowd

But after the rehearsal Miss Fontaine and Mr Bruce play the scene and seem to be alone on a headland above the sea But they aren t alone—twenty five persons behind the camera are looking at them

1944 Red Cross Fund Needs Your Help

WHEN bombs fall there is no time to send help half way around the world When a badly wounded fighting man needs a transfusion, it is too late to begin looking for a blood donor or find a nurse to care for him. When a lonely soldier learns of trouble at home, he needs help—immediately

The American Red Cross provides that help wherever and whenever the need arises. A continuous procession of blood donors must be maintained, nurses must be recruited for the Army and Navy, trained Red Cross workers and supplies must be sent to camps, hospitals and foreign theaters of operation the world over

When a train crash leaves scores injured, when flood engulfs a town, when epidemic strikes, delay may cost lives Red Cross disaster relief and medical supplies, held in readiness for such emergencies, plus trained workers to rescue and assist victims and help in their rehabilitation, will prevent delay and thus save many lives

To fulfill its many obligations to the armed forces and our people, the American Red Cross needs your help During 1944 it must supply some 5,000,000 blood donations Each month 2,500 nurses must be recruited for the Army and Navy Red Cross field directors and other trained personnel must be stationed at military and naval posts and hospitals to help our fighting men and their families when personal trouble brews, a task in which the Red Cross chapter on the home front ably does its share

At home the Red Cross must continue a state of alert Disasters must be met as they occur Nurse's aides and first aiders must be trained and other educational projects continued Food parcels for distribution to prisoners of war must be packed, surgical dressings made and the thousands and one details of administering a far-flung, busy organization must be attended

All activities of the American Red Cross are financed by voluntary gifts and contributions During March, designated by President Roosevelt as Red Cross Month the American Red Cross must raise its 1944 War Fund of unprecedented size to meet unprecedented needs Your contribution will assure maintenance of all Red Cross services and thus indirectly help save many a life. Let's give!

Televish Theatre For Keys

Streamlined television theatres, with every conceivable gadget, will spring up in key cities shortly after the war, according to belief held by technical experts, trade engineers and others familiar with latest developments in the tele field Houses will spotlight their television setups for principal draw but bulk of performance will be motion pictures produced, as usual, in Hollywood.

The Post-War Visual Education Potentialities In Latin America

By NATHAN D. GOLDEN

Chief Motion Picture Unit
Division of Industrial Economy

THE Latin American market will have tremendous sales potentialities for American 16mm motion picture sound equipment and films of a pedagogic type in the post-war period The retarding factor for the present is insufficient funds to properly equip the schools of Latin America with visual education equipment The program of showing educational films now being carried on by the Office of the Coordinator of Inter-American Affairs in Latin American countries is doing more to develop the use of motion pictures in teaching, than any medium yet devised This agency, with its 113 16mm projectors and its 69 mobile trucks and films is bringing home to educators and civilians in the remotest regions of Latin America the effective teacher the motion picture can be when used for that purpose It is introducing American-made equipment in markets in which it has never been before It will be those who have seen these films and equipment that will urge their government and school systems to provide the necessary funds to give to the children of Latin America this improved method of learning by visual education

American visual education libraries too will find a waiting market when these funds become available Films will naturally have to be in the language of the country to have their greatest value Many Governments such as Brazil, Chile, Colombia, El Salvador, Peru and Venezuela are sponsoring the use of visual education via motion pictures. But here too there are but limited funds available for this development

When compared with the visual education development in the United States where some 28,800 (12,000 silent) 16mm projectors are available in the schools and colleges for teaching purposes, one finds that a country like Chile has but 10 schools which have sound 16mm projectors and not more than 60 such projectors are located in the entire country That in Argentina there are several thousand silent 16mm projectors but very few are with sound That a country as large as Brazil has 1800 silent and approximately 100 16mm. sound projectors owned by the Government for school use That in countries like Costa Rica, Cuba, Dominican Republic, Ecuador, Honduras, Mexico, Nicaragua, Panama, Paraguay, and Uruguay none of its schools have any equipment for the showing of educational films On the other hand the Ministry of education in Colombia supplies equipment and films to all private and official schools, having 44 16mm. sound and silent projectors available In El Salvadorian schools only 7 schools use films, in Guatemala only two, and a like number in Haiti have 16mm. sound projectors In Peru the Ministry of Education maintains a film library and has encouraged visual education in its schools and colleges, but only 7 sound 16mm. projectors and 400 silent projectors are available in all of Peru How many of these are the property of the ministry is not known.

Only one school of learning, the University of Montevidea, uses motion pictures for instructional purposes The Ministry of National Education instituted a program for the showing of educational films several years ago, but due to the lack of funds the program has never attained any substantial development. Twelve 16mm sound projectors are made available to these schools interested Educational institutions are visual-education-minded, but here again present funds retard this development.

The following resume by countries gives a thumbnail sketch of the dearth of equipment available in the schools of Latin America and should afford American equipment manufacturers and pedagogic film producers a basis for the development of markets after the war in this untapped region

Argentina

There were no worthwhile developments in the production of educational or commercial films during 1942 In fact, no great interest seems to be attached to the development of this type of production, for one reason perhaps because profitable distribution is out of the question, but American film distributors in Argentina have expressed a desire to handle more American educational "shorts"

As regards visual education, very little if any progress was made during 1942, chiefly, it is supposed, because of the lack of funds of the Federal and Provincial Governments with which to finance the official and unofficial projects on the subject It is unquestioned that visual education has potentialities in relation to the vast improvement registered in Argentine educational facilities in general, but this step is probably for post-war consideration.

There are no available statistics for teaching purposes nor of the number of these institutions maintaining film libraries, but it is estimated in trade circles that there are in Argentina several thousand silent film projectors and several sound film projectors for 16mm films Some development was registered in the use of 35mm projectors for use in conference rooms of the newer government and private buildings, and of the 16mm projectors by some of the more energetic commercial firms, but it can hardly be said that Argentina is a ready market for any immediate development in this respect A complete system for distributing 16mm films has been set up by the *United States Coordination Committee for Argentina* and it is being gradually put into effect for the distribution of American "shorts" which are being shipped by governmental agencies from the United States The very short commercial films, which are used for advertising purposes in regular shows and which are exhibited in most of the cinemas in the key cities and many of the cinemas in the remainder of the country, showed considerable development during 1942 as regards quality, this being attributed to the ingenuity of European refugees, and who seem to have studiously applied the more modern ideas in this connection gained from experience in the film production industries of Central Europe

The *Archivo Grafico* of the Argentine Government has set up a film library to which all Argentine producers have been asked to send a copy each of their films "Archivo Grafico" has also accepted films from American company representatives and appears to be interested in cooperating in the distribution of 16mm. films.

Bolivia

So far as is known the American Institute (in La Paz and in Cochabamba) is equipped with equipment for showing educational films and this institution has both 16mm and 35mm silent projectors It is not believed that there is a market for films, however, since the Institute has no funds for this purpose and has so far used only those educational films which it has been able to obtain from the United States Government for free exhibitions

Brazil

Approximately 1,900 projectors of the 16mm size are in operation in schools and public buildings, of which not more than 100 are equipped with sound devices Most of these projectors are owned and operated by the Government in public schools Though statistics are not available, it is believed that their distribution by districts follows more or less proportionately the outline for motion picture theater equipment, the larger number being operated in the central and southern districts of the country.

(Continued on Page 56)

Aces of the Camera

(Continued from Page 46)

the strong and husky Len Smith would make a good assistant cameraman You had to be strong to be an assistant cameraman in those days. Vitagraph used a great, box-like camera that simultaneously made two negatives; one for the domestic release and one for foreign It was heavy and cumbersome and was mounted on a heavy, wooden tripod The main job of the assistant was carrying it around And there was plenty of that to do because the camera had only one lens, and every time the story called for a closer shot the whole business had to be moved Len remembers how they would go out on location, find just the "right" spot on top of a hill, and call to him to bring up the camera Then, when Len thought they were all set, they'd change their minds and the new assistant would have to cart the stuff down that hill again and up another one

Len doesn't remember the name of that first picture to which he lent his efforts as assistant cameraman But he does remember that William Gaskill was the director, Rex Ingram the assistant director and Helen Gardner the star.

After eleven months of being an assistant, Len was made a full-blown cameraman The first picture he shot was directed by Harry Davenport and starred Tony Moreno He was doing all right. Then Len, and another cameraman by the name of Nicklous, got an assignment to film the first feature picture ever made in America. It was titled "The Battlecry of Peace", starred Paul Scardan, Norma Talmadge, Harry Morey and Anita Stewart, and was directed by Wilfred North and James Stuart Blackton The picture had a running time of over two hours and played at the Criterion Theatre in New York for more than a year Motion pictures had arrived, and so had Len Smith, cameraman

Len has a lot of happy memories of his days at the old Vitagraph Studios Everybody was wonderful, to hear Len tell it And the company was wonderful to work for. Every Christmas, for instance, the employees received ten per cent of their year's salary as a bonus, as well as a Christmas basket, complete with turkey and trimmings, handed to them in a special ceremony by John Bunny and Flora Finch Everyone had lots of fun, too Especially Larry Semon He indulged in the strenuous kind of fun There were several companies working on the same lot at that time, and Larry's favorite gag was to break up the players during their most dramatically tense moments He usually accomplished this by the most uninhibited methods Either by lowering himself into the set on a rope, or, from a point of vantage in the scenery, by sloshing one of the principal thespians in the face with a pie. Larry 'specially loved the pie gag. The head men had to do something about it They thought it might be necessary to send Semon out to California While they were thinking about it Semon convinced them — by pushing Maurice Costello, complete and dapper in evening clothes, into a pool in the middle of a picture

So Len got to Hollywood on Larry Semon's push He was sent along as cameraman

In 1917, when the United States declared war, Len enlisted Even the war must have looked like a cinch to Len after spending a year in Hollywood with Larry Semon.

Twenty-nine days after he enlisted Len was in France. He got back in September, 1919.

Back in Hollywood, Len returned to his job with Vitagraph. But after a while he left them for Educational Films where he worked with Norman Taurog He has nothing but praise for Taurog and the others with whom he worked at that time. In fact that is one of the most impressive things about Len Smith He quite evidently gets a big kick out of life, and he likes everybody That's a pretty sound formula for success in life in any business.

His years with Educational are memorable for Len in the constant state of excitement and uncertainty that prevailed with Taurog and Lloyd Hamilton playing gags on one another, and trying to top each other's gag Such as the time Hamilton fell asleep in an airplane, an old jennie, and awakened to find himself flying high over the ocean On another occasion, during a snow sequence, Hamilton had to appear from inside an igloo While he was in there Taurog had the entrance sealed up and wouldn't let Hamilton out till he had hollered "uncle". Then there was the time that Hamilton got a nice big sway-backed horse for Christmas

It was during this period that Len Smith and Koney Koenekamp, both baseball bugs, formed their own team, the invincible Griffith Park Orioles, and won the city championship five years in a row.

In 1927 Len went to Metro-Goldwyn-Mayer He has been there ever since His first big picture with M-G-M was that studio's first musical, "The Broadway Melody", which still rates high as one of Hollywood's best

He photographed the Buster Keaton series, the Marie Dressler series, the "Maisie" pictures, with Ann Sothern, and the "Tarzans", and "The Mortal Storm" For the last three and a half years he has shot nothing but color

The biggest adventure of Len's career was his location trip to Alaska and the Arctic Ocean to film "Eskimo", in 1933. Paul Vogel, A.S.C., was Len's assistant on that adventure Bill Foxwell and Al Scheving, who had played tackle for U.S.C., went along too Richard Rosson was the unit director.

It is difficult to describe the hardships and dangers that crew survived during the four and one-half months it took to get the whaling sequence Most of the action took place in 18 foot boats, among icebergs in the Arctic Ocean and in the region of the Diomede Islands that lie between Alaska and Russian Siberia From these small boats the whales were harpooned by hand, in the primitive manner As soon as the harpoon struck, the whale would take off at a great rate, dragging the little boat with all the camera equipment in it, and generally end up by sounding under a convenient iceberg. Ten whales had to be harpooned to complete the sequence and not all of them friendly It must be an uncomfortable feeling when 70 tons or more comes charging at you in a cockleshell of a boat

Part of the sequence, when the boat had been brought up to the exhausted and dying whale, called for the stunt man to jump from the boat onto the back of the whale, run up to its head, and apply the *coup de grace* with a well-aimed harpoon to the brain.

At the last, psychological moment, the stunt man refused to do it. There they were in the middle of the Arctic Ocean, their precious whale brought to bay after months of trying, arduous work, with, perhaps, only minutes to spare before the whale was off again—and the stunt man failed them It was then that Paul Vogel, A.S.C., did one of the bravest things ever recorded in or out of fiction. Realizing that all would be lost unless someone acted quickly, he grabbed the harpoon, leaped onto the monster's back, and delivered the death blow himself. In its death agony the whale spun in the water, around and around at a dizzy speed, its tail and fins thrashing about in death-dealing blows Vogel was thrown into the icy water, miraculously escaped the flailing monster, and was pulled into the boat The other boat was caught by the great fins and cut in two as though by a buzz saw Miraculously again no one got more than a dunking.

As though icy seas, blizzards and mad whales were not enough, Len's party had another thing to worry them. If they were caught within the 3-mile limit of the Russian coast they faced incarceration in the Siberian salt mines. It was no joke. The United States and Russia did not recognize one another in those days and the Russians used persuasive methods to discourage trespassers. Hunter, the chief engineer on the ship chartered by the expedition, had spent two years in the mines, and he kept everyone alive to the reality

The only trouble was that the whales didn't know about the Russian attitude and frequently led the crew well within the Russian 3-mile limit When this happened, the mother ship, skippered by the late Louis L. Lane, past president of the San Francisco Pilots Association, would remain outside the limit

(Continued on Page 61)

In

ACADEMY AWARDS

for outstanding achievement

in The Creative Arts

and Perfection in Craftsmanship—

The Constant and Vital Ingredient

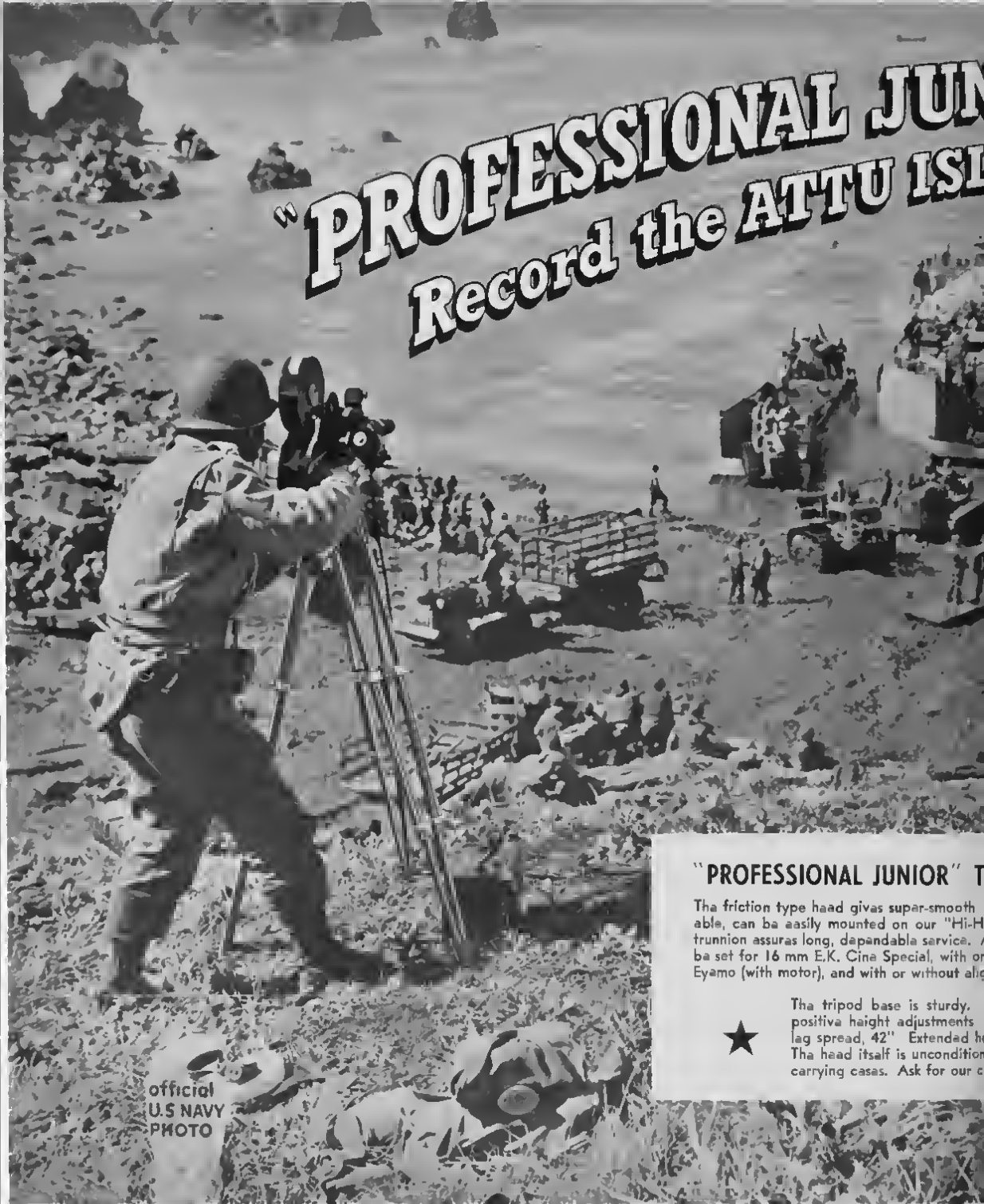
is always the Combination of

EASTMAN

FILMS

(negatives - positives - duplicating - recording)

J. E. BRULATOUR, Inc.
Distributors



"PROFESSIONAL JUNIOR" T

Tha friction type haad givas super-smooth
able, can ba aasily mounted on our "Hi-H
trunnion assuras long, dapandabla sarvica.
ba set for 16 mm E.K. Cina Special, with or
Eyamo (with motor), and with or without alig

★

Tha tripod base is sturdy.
positiva haight adjustments
lag spread, 42" Extended h
Tha haad itsalf is unconditio
carrying casas. Ask for our c

IOR[a]* TRIPODS
AND landing

TPODS—*With Removable Head*

pan and 80° tilt action. It is remov-
low-base adaptor. The large pin and
" level is attached. The top-plate cen
out motor, 35 mm DeVry and B & H
gauge.

ead-leg" design affords utmost rigidity end quick,
plete tripod weighs 14 lbs. Low height, at normal
72". All workmanship and meterials are the finest.
guaranteed 5 years. Also available are heavy fibre

*Patent No. 2318910

Above—The E K Cine Special Camera Mounted on the new Professional Junior * Triped

Right—Collapsible and adjustable telescoping metal Triangle Extends from 16½" to 26½". Has wing locking nuts for adjusting leg-spread, and stud holes for inserting points of tripod feet Triangles prevent damage insure cameramen that their equipment remains in correct position and will not slip or mar any type of surface Further particulars sent upon request

Tripod Head Unconditionally Guaranteed 5 Years

"Professional Junior"* Tripods, Developing Kits, "Hi-Hats" and Shiftover Alignment Gauges made by Camera Equipment Co. are used by the U. S. Navy, Army Air Bases, Signal Corps, Office of Strategic Services and other Government Agencies—also by many leading Newsreel companies and 16mm and 35mm motion picture producers.

Cable: CINEQUIP
Circle 6-5080

CAMERA EQUIPMENT CO.

FRANK G. ZUCKER
1600 BROADWAY NEW YORK CITY

Conserve Your Photofloods With Home-Made Dimmer

By JAMES R. OSWALD

THERE'S no need to burn your photofloods lamps at full brilliancy when focusing or adjusting the camera, when this home-made light dimmer will not only make the job more pleasant, but will add considerably to the life of the photofloods. Built at a cost of around one dollar, a similar unit, when purchased ready-made, retails for five or six dollars. The parts are enclosed in a 3 x 5 inch wood index card file box (or equivalent box constructed of plywood), for the sake of appearance, although an ordinary flat board is satisfactory, if surface wiring is used. In addition to this, the following material is required:

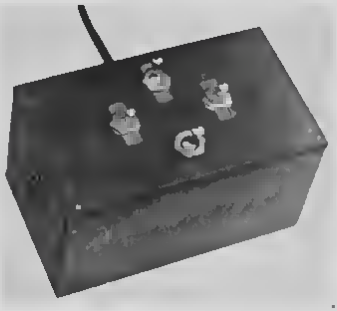
1 Double pole, double throw toggle switch,

3 Single pole, single throw toggle switches (2 of which are optional)

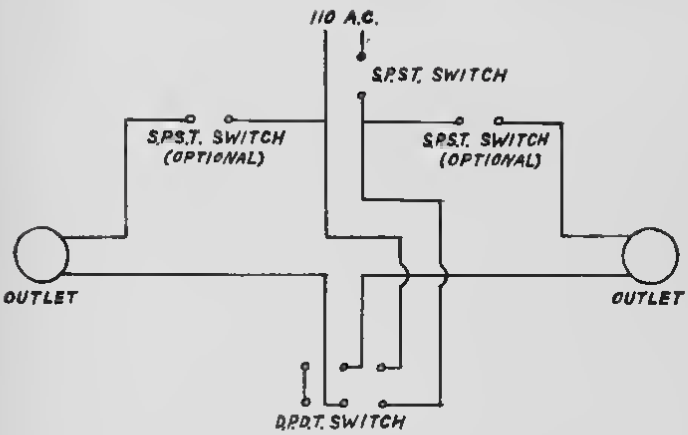
2 Outlets

1 6 ft. lamp cord with plug.

Several short lengths of lamp cord (or other heavy wire), for circuit wiring.



Above is the home made dimmer. Below is the diagram describing the wiring



The switches may be procured from any radio, or electrical supply store. The outlets (baseboard receptacles), from the 5 and 10 cent store, where the lamp cord might also be purchased.

The wiring diagram is self-explanatory. Working on the "series-parallel" principle, the light dimmer does away with the need for a resistance, or rheostat. When the D.P.D.T. switch is thrown to the left, the photofloods are on dim, their brilliancy approximately equaling a 60 watt lamp. With the switch thrown to the right, the lamp light to full brilliancy. The two S.P.S.T. switches (marked optional) are merely for controlling the photofloods independently, when on bright. If these switches are used, they both must be thrown to the "on" position in order to have the lamps light at all, when on "dim." This is necessary to complete the "series" circuit, in which the two photofloods must also be used, in order for either one to light.

The remaining S.P.S.T. switch is simply an "on" and "off" line switch to control the AC current for the entire box.

You'll find this useful accessory a great aid to photographer and model, both in easing eye strain and in conserving photoflood lamps as well.

Post-War Visual Education Potentialities

(Continued from Page 51)

British Guiana

Various kinds and sizes of projection apparatus are used in the local theaters. The first class houses use American equipment. Government institutions are using American portables. Schools and public buildings are not equipped with projection apparatus. The Georgetown Consular District has recently been supplied with a portable American 16mm. sound projector, with which it contemplates showing non-theatrical films to schools, the Y.M.C.A, 4-H Clubs, etc., in Georgetown and vicinity.

Chile

The Institute of Educational Cinematography maintains a film library of some 172 silent films and 68 sound films, most of which are of the 16mm. size, plus 17 educational features of normal theater size. These films are exhibited throughout the country in schools, clubs, and other institutions. The Institute has been in existence over 10 years and most of its films are quite old, about 80 per cent having been bought from the United States, 10 per cent from England, and 10 per cent being local manufacture. The Chile-United States Cultural Institute has sponsored since February 1942 showings of educational films (which now include 53 short subjects) supplied by the Coordinator of Inter-American Affairs and by the Department of State. Over 300 exhibitions of these films to date have been given in Santiago, Valparaiso, and the surrounding district to specially selected audiences totaling over 100,000 persons.

Several Government agencies, as for example the Direccion General de Sanidad, the Caja de Seguro Obrero, etc., own projectors and a few use sound trucks to take educational films into outlying districts which are not otherwise reached by any motion pictures. The limited amount of materials so far available has prevented any rapid expansion in this program. Some commercial firms have used films for advertising but on a very small scale.

Educational institutions have not made any great use of films as a part of their teaching program. A lack of instruction in the use of such material, combined with the small number of films available, limits the possibility of employing this teaching medium to the same extent as in the United States. There are not more than 8 or 10 schools in Chile with sound projectors, although some have silent machines. None of these machines are used to any great extent due to the lack of material and the cost of renting films. There are no

(Continued on Page 58)

Books That Talk

Sound Motion Pictures in the Home

Current news, science, literature, humor, drama, opera and travelogs—all these will be a part of the post war library of the average home in the form of convenient 16 mm *sound-films!* These talking books are here now and their number is being enormously increased by the war training and entertainment program. The equipment for showing brilliant, clear pictures with rich, life-like tones is also ready now, simple to operate—and surprisingly low in price. Of course, today these Ampro projectors are going 100% into the war effort. After D-Day—Ampro units will be ready to make 16 mm. sound films a reality in your home. Write today for the catalog of Ampro 8 mm. and 16 mm. silent and sound projectors.

Buy War Bonds

AMPRO

Amproscend Model TSA

Ampro Corporation **Chicago 18, Ill.** ***Precision Ciné Equipment***

Post-War Visual Education Potentialities

(Continued from Page 56)

schools and colleges maintaining film libraries, the only libraries being those of the Institute of Educational Cinematography, the Chilean-United States Cultural Institute, the library belonging to a commercial firm, and miscellaneous smaller collections.

Most of the 35mm projectors in use in Chile belong to commercial theaters. Of the estimated total of 380 35mm projectors in the country probably not more than 10 projectors are to be found in schools or other educational institutions. As far as 16mm projectors are concerned, it is estimated that, including those that are privately owned, there are some 60 sound machines in Chile and about 350 silent projectors. No exact figures are available as to the number of 8mm projectors in use, but it is estimated that there are approximately 600 in Chile.

The number of schools maintaining slide film libraries in Chile is not definitely known, but it is believed to exceed 15 or 20. Apart from the film library maintained by the Institute of Educational Cinematography the only Government organization which is known to maintain a library is the Direccion de Sanidad, which has a small library of health films.

As far as prospects of selling films and equipment to educational institutions are concerned, it is believed that in the post-war period there may be a fair market for educational films and projectors.

Columbia

The educational campaign by means of the exhibition of motion picture films started with the inauguration of the "Cultural Theater" in 1934, but it was only since 1939 that this campaign really had any practical activity. The free exhibition of motion picture films in the "Cultural Theater" at the National Park "Claya Herrera" was complemented in 1940 by the "Ambulant Schools" for that exhibition of cultural motion pictures in the different districts of the city of Bogota, and through the different municipalities within the country.

These "Ambulant Schools" operated under the direction of the Ministry of National Education until February 1942, when they were transferred and placed under the control of the "Directors of Departmental Education" and handed over to the Departments of Atlantico, Bolivar, Caldas, Cauca, Magdalena, Santander, Tolima, Valle, and to the Municipality of Bogota.

The acquisition and purchase of the equipment and trucks for the "Ambulant Schools" were obtained through the economical cooperation of various public and private institutions which contributed to the financing of same in the amount of 51,500.00 pesos. With this money it was possible to equip nine "Ambulant Schools", giving service of motion pictures, records, and library. During the first trip undertaken by six of these schools and covering a period of 80 days, they were able to visit 229 municipalities, making exhibitions to 413,891 spectators. During the second, they visited 195 municipalities, presenting 1,778 exhibitions to 460,596 spectators.

The educational institutions are especially interested in the development of these educational campaigns, and due to the cooperation given by the Ministry of Education, which is supplying equipment and motion pictures, there has been a great increase in the exhibition and cultural motion pictures in all private and official schools and in all these institutions which look forward to a better education for the people. More or less from 20 to 30 private institutions and schools, besides all the public schools, educational departments and official schools, are making use of motion picture material, supplied by the Ministry of National Education, as a complement to the educational campaign in favor of a better culture for scholars. Practically no school or college has any educational film equipment and the greatest majority uses the motion picture films supplied free of charge by the Ministry of Education. There are 24 35mm projectors in use in educational institutions in Colombia and 44 16mm sound and silent projectors available.

Slide-films Used by Schools

There are some private and official colleges in addition to other institutions, such as Liceo Nacional Femenino (Bogata), Bibhoteca Nacional (Bogota), Instituto de la Salle (Bogota), using slide-films as a complement to some of their school classes such as Botany, Zoology, Art History, Geography and Universal History, et cetera. (With the exception of the equipment used and owned by the Instituto de la Salle, the rest of the equipment is owned by the Ministry of National Education.) There are no schools maintaining slide-film libraries, and only a limited number of the above mentioned schools possess small quantities of slides.

Film Libraries Maintained by Government Educational Officers:

The Ministry of National Education has an approximate stock of 450 films, of which there are 343 in the "Cultural Theater" warehouse and the rest is at the schools and other institutions. Of this stock, there are only about 250 films (35mm and 16mm) that can be used—the rest are worn and are useless. These films are distributed for exhibition purposes among the schools, upon request made to the Ministry of Education. The exhibitions are free, and the Ministry supplies the projecting equipment and the operator if necessary.

Government production of Educational Films:

The Ministry of National Education did everything possible in order to be able to produce educational films, installing laboratory equipment, et cetera. During the years of 1939, 1940, and 1941 the Ministry worked on the production of films.

Costa Rica

No educational films proper, except the ones exhibited at the Raventos theater for school children, have been shown in schools in Costa Rica. There is no 16mm equipment available at schools, except an old silent projector at the Escuela Normal de Heredia, which is never used, and no plans are contemplated as far as it is known for adopting this medium of education. There is no market for the sale of educational motion picture films and equipment.

Cuba

One firm exists in Habana which has made a considerable investment in a laboratory and projectors to exhibit 16mm educational and commercial films. This is the Peliculas Educativas, S.A. The firm maintains six sound projectors and three silent ones and has received a few of the films produced by agencies of the United States Government.

The Institucion Hispano-Cubano de Cultura is taking a leading part in collaborating with the Peliculas Educativas, and the *Compania Industrial Cinematografica de la Habana, S.A.*, of Trocadero 9, Habana, is making films for distribution in Cuba, most of them circulated with the aid of the Peliculas Educativas.

Zenith Films, S.A., 215 Consulado, Habana, is another firm which has devoted much effort to circulate 16mm educational films. This concern obtained several films from England, but the last shipment was lost at sea.

Both of these concerns have expressed great interest in the 16mm films produced by agencies of the United States Government, particularly in the four sound films in the Spanish language produced by the Department of Agriculture.

The 35mm British propaganda films are distributed for the most part through one of the major American distributors in Habana, and are showing in practically all of the theaters which exhibit daily. The American films are distributed through a Coordination Committee and are shown mostly in the various clubs, social organizations, and in projection rooms of private individuals. Their circulation is far below that of the British Government films.

Educational institutions are hampered in the use of educational films by lack of funds. Also the difficulty in obtaining Spanish-version pictures, or Spanish sub-titles in the American sound films of 16mm have worked against a wide circulation. Price, too, is a drawback. Local agencies distributing films

(Continued on Page 62)

BETTER THAN EVER

The high quality and exceptional uniformity of Eastman motion picture films not only have been maintained, but have been improved under the tremendous pressure of wartime production—a real triumph of precision manufacturing. Eastman Kodak Company, Rochester, N. Y.

J. E. BRULATOUR, INC., *Distributors*
Fort Lee Chicago Hollywood

EASTMAN FILMS

AMONG THE MOVIE CLUBS

8/16 Movie Makers

The 8/16 Movie Makers of Orange County, California, installed its new officers at the January meeting. New officers are: Harold Rider, President, Earl Cowan, Vice-president, Loren Finley, Secretary-Treasurer, Corp Hugh Hicks, Program Chairman; Harold Hams, Assistant Program Chairman, and Mr. and Mrs Whitsett, In Charge of Publicity.

Following installation of officers, the members enjoyed seeing "Beyond Manila," a three-reel picture in color, which received much applause. Also screened was a General Motors film, "The Duck," a film of the new army truck-boat combination At the February meeting the annual picture contest will hold the spotlight

St. Louis Club

Reports from the Amateur Motion Picture Club of St Louis indicate its first New Year's Gala Show, held at the Hotel Jefferson, was a great success Highlighting the program were Will Lindhorst, famous magician; "The Aristocrats," one of the most noted male quartettes in America; and the war film, "Battle for Britain."

Minneapolis Cine Club

Lee Cornell's Boy Scout film, which has been shown all over the United States, was the feature of the January meeting of the Minneapolis Cine Club. Also, there was a practical demonstration, with actual titles made and photographed on the spot. Next followed a showing of a medical film.

The club has appointed a Film Project Committee with Art Schwartz as chairman. Others on the committee are "Turk" Hopkins Dan Billman, Doc Proffitt and Ray Rieschl

San Francisco Club

Leaders of the San Francisco Cinema Club should be congratulated for setting up a Technical Service Committee of real experts to assist members in their technical problems Club members are advised to consult this committee before experimenting, and thus avoid waste of precious film and effort The members of the committee are Rudy Arfsten, Chairman; Jesse Richardson, Vice-chairman; Dr Allyn Thatcher and John Smurr

The January meeting of the club was held at the Women's City Club Two films were screened "Lake Tahoe," 1200 feet of Kodachrome by Leon Gagne, and "Autumn in Yosemite," also in Kodachrome, by President Lou Perrin

Philadelphia Cinema Club

Four films, including two prize winners, was the film fare of the Philadelphia Cinema Club at its January meeting The two prize-winners were both photographed by A L O. Rasch, and were "The Big Show" and "Idle Days" The other films were "Niagara Falls," by Mr Kenneck, and "Vacation," by Mr Coles

M.M.P.C.

The January meeting of the Metropolitan Motion Picture Club was devoted to a novice contest. Seventeen films were entered in the contest which was judged by the audience We are sorry to say that the club secretary did not get the names of the winners to us in time to publish in this issue

Get Your Club News In

We are more than pleased to print news of the various cinema clubs in the Cinematographer However, it seems that club secretaries and publicity committees forget that magazines have deadlines For news to appear in the Cinematographer it must reach our office not later than the 17th of the month By that we mean it must be here by the 17th of February to appear in the March issue. Won't you secretaries and publicists please mark that down and then send your news along—THE EDITOR

Los Angeles 8mm Club

Five pictures of the 1943 contest were screened at the January meeting of the Los Angeles 8mm Club They were "Memories Are Not Rationed," by Claude Cadarette, "Tonopah, Nevada," by Gertrude Millar, "Vacation Reflection," by Milton Armstrong, "V for Vacation," by Bill Wade, and "The Magic Carpet," by Leon Sprague

The New York Eight

"Fire From the Skies," the famous 1942 Best Ten Winner made by the Long Beach Cinema Club, and "Behind the Scenes," by Mildred Caldwell of the same club, were the features of the January meeting of the New York Eight Victor Ancona gave an illustrated talk on composition

Film Review

Review of film submitted by C W. Wade, or North Hollywood, Calif 200 ft 8mm Kodachrome—entitled, "V—For Vacation."

This film was probably made for a contest in his club, and is an excellent example of a genuine "home movie" The man and wife wish they could go somewhere, but spend their vacation at home instead, working in the yard, canning fruits, etc.

The scenes are well edited throughout, and assembled in logical continuity Double exposed main and sub titles are expertly handled, probably with the assistance of a wind-back attachment. The titles are nicely hand lettered in a legible white, large enough letters, well worded and centered, and not too long. The uniform sub-titles are cleverly double-exposed over a Liberty bell in low key against a dark background, and these subtitles are adeptly cut in

Exposures are uniformly good, composition of the scenes is pleasing, and the camera angles are varied and well chosen An effective use is made of "background action," showing mother busily working in the background of several scenes, as man or wife are featured in the foreground.

The simple but interesting and topical story shows the couple resting in the backyard, wishing they could take a trip But they decide to be patriotic and stay at home for their vacation The wife starts to rake up leaves and gathers walnuts, but husband pitches golf balls until one strikes her on the leg She insists that he get to work, so he tries to pitch walnuts into a box He misses the box, of course, then she shows him how, with a bulls-eye every time Cutting is particularly well handled in the sequence. Then they both shell walnuts and pack them into jars A sequence in the kitchen, showing canning of fruits is well lighted, and continuity expertly edited Outside again, the husband takes a ladder and climbs up on the roof, to sweep off the leaves, which is a familiar chore to anyone blessed and annoyed by walnut trees

She tells him to stop loafing on the roof and come down and help her. He comes down but uses a clever gag of going out into the yard to work, carrying the garden tools in his golf bag He rakes leaves for awhile then leans on his rake, apparently dreaming about something. Here, and elsewhere, he makes good use of a chemical fade, and dreams of some previous vacations, inserting a few good scenes of trips taken

After the dream of other vacations, they sit down again, but recall there is one thing they have not done, which

(Continued on Page 63)

Aces of the Camera

(Continued from Page 52)

and keep a lookout for the Russian gunboat that patrolled those waters If the gunboat were sighted a special signal flag was to be run up.

One day the whale that Len's boat had bagged pulled them right up onto the Siberian beach. Inasmuch as the script called for a sequence of a beached whale being cut up for food and blubber in the approved Eskimo manner, the crew went ahead, and Len set up his camera.

Suddenly the agreed signal was hoisted on the mother ship Everyone scrambled for the boats and pulled out The ship, instead of staying outside the limit, came in to get them, radioing, meanwhile, to the nearest U S Coast Guard cutter. The cutter told them it could do nothing to help if they were in the 3-mile limit They would have to help themselves. Well, they just made it Aboard the ship, with the auxiliary motor contributing its three knots, and all sails set for a full speed of 12 knots, they were three and a half miles out when the Russian gunboat overtook them. He circled about them, while everyone held their breaths, then went away

Len laughs when he talks about that incident He said it usually took 45 minutes to get a full spread of sail on that boat, but the day that Russian gunboat hove in sight every stitch of canvas went up in less than 15 minutes. Maybe the chief engineer's stories hadn't been in vain

Incidentally, the whale on the beach was too important to miss. So, Russian gunboat or no Russian gunboat, they went in every day for two weeks, cut up the whale and finished the sequence

Len and his party were in Nome when Post and Gatty made their epochal flights over that region And after Gatty crashed in Siberia it will be remembered that the Russians flew him out in a flying boat The flying boat ran out of gas and crashed about five miles out It was then Len's boat that towed them in

Len Smith's greatest contribution to the industry has been his color pictures His "Billy the Kid" won the second place Academy Award for color His "Smilin' Through" was a contender the following year, and, had it been a better picture, would, in the opinion of many, have had a good chance for top Technicolor honors From a photographer's standpoint, it was a daring picture

This year Len enters the lists with "Lassie Come Home" The first feature, incidentally, ever shot on Monopack It was a beautiful job

Len may have hopes for the Academy Award but he doesn't express them He hopes the war will soon be over so that all the boys, especially the A S C boys, can come back He hopes they know they have not been forgotten. He's very grateful to Fred Jackman and the A S C board for the support they have given him during his term of presidency. And he means every word of it

Here's to you, Len Smith. In the words of our Chinese friends, "May your shadow never be less"

★ THERE'S A BRIGHT WHITE STAR IN DEVRY'S ARMY-NAVY "E" PENNANT proud symbol of DEVRY'S *continued* excellence in the production of motion picture sound equipment and electronic training devices for the Armed Forces. DEVRY isn't forgetting you, its valued peace-time customers—but in *all* DEVRY plants—and with *all* DEVRY personnel—*'Uncle Sam' comes first* There are NEW and improved DEVRY designs and mechanisms for you to look forward to when Peace returns So keep your eye on DEVRY and your money in America's first and best investment U S War Bonds and Stamps

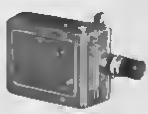
ARMY NAVY E

for continued excellence in the production of motion picture sound equipment

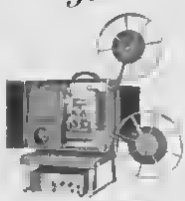
DEVRY

Since 1913 . . . An Outstanding Name

IN THE CINEMATIC WORLD



DEVRY 35mm Battle Camera



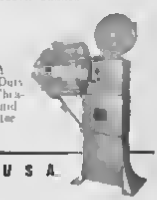
DEVRY 16mm Sound on Film Projector

THERE'S A DEVRY FOR EVERY NEED

16mm Motion Picture Sound Projectors
16mm Arc Lamp Sound Projectors
16mm Silent Projectors
16mm Motion Picture Sound Cameras
16mm Separate Sound Recorders
All-purpose Silent Cameras for Black and White or Color
35mm Heavy duty Theater Projectors
35mm Semi-portable Sound Projectors
35mm Portable Sound Projectors
35mm Sound Studio Cameras
35mm Silent Motion Picture Cameras
Amplifiers Public Address Systems—Mobile Sound Systems Electronic and Photo Electric Devices—Camera and Projector lenses and Other accessories.

DEVRY 16mm Movie Camera

The results of DEVRY'S Sound Design Competition will be announced shortly. Suffice it to say, you may hope for the highest mechanical improvement in motion picture equipment to DEVRY assures that our interest will be profitably tied to best of our ability



DEVRY Heavy Duty 35mm Theatre Sound Projector

Distributors in World's Principal Cities

DEVRY CORP., 1111 ARMITAGE AVE., CHICAGO 14, U S A.

New York • CHICAGO • *Hollywood*

THE BETTER WE BACK THE ATTACK WITH OUR BOND BUYING — THE SOONER THE VICTORY

Dance Short In Museum

The Rockefeller Museum of Modern Art has requested a print of Veloz and Yolanda's 'Cavalcade of Modern Dance," made by Warners, because of its historic significance.

Coburn Credited

Robert Coburn still photographer on Columbia's "Cover Girl," gets screen credit, due to fact his color photographs of 15 cover girls who appear in films are used as inserts in picture.

Post-War Visual Education Potentialities

(Continued from Page 58)

of this class protest that a price of $50.00 per reel, with a $30.00 royalty, is too high.

A few religious pictures were shown by Catholic schools and colleges, but aside from these, very few educational films were shown in schools. No schools or colleges at present maintain film libraries, although many of them want films. They buy occasionally from big American distributors.

Aside from the machines privately owned, whose operation does not involve the purchase or rent of films from distributors, there are believed to be between three and four hundred projectors for silent 16mm. film in operation. Of projectors for sound film, there are not more than about 30. This is naturally due to the absence of dubbed film of that size, or films with Spanish sub-titles. However, there are two concerns now equipped to dub films of this size, or to supply Spanish sub-titles. They are the Peliculas Educativas, S.A., and the *Laboratorio CHIC*, also of Habana.

Slide-films are used very little. A few private schools have made inquiries recently concerning slide-films on natural history. Language constitutes a problem. None of the schools maintains its own slide-film library. Ten schools in Habana now take film or slide-film service, and it was expected that with the beginning of the school year last September there would be nearly a hundred.

No film libraries are maintained by the Government Educational Office. However, through the cooperation of the distributors of educational films mentioned above, a conference of school inspectors from each province was held in Habana, and films were shown in an effort to secure a government subsidy for using films in schools. A project to get projectors in a number of schools by charging five cents per pupil failed in 1941.

Dominican Republic

As yet no motion picture films are used in education. However, an interest is being displayed in the field of visual education, but no film libraries are maintained by educational institutions. No 16mm. projectors are in public use in the Republic with the exception of a silent one owned by the *Compania Electrica* and one sound projector at present in possession of the Legation. There are a few 8mm. and 16mm. projectors in private use, but no definite estimate can be made of the number. Slide-films made by local photographers are used for advertising in theaters in company with the short subjects preceding the main feature. No schools have slide-film libraries. The Government does not produce educational films, nor are any commercial or educational films produced domestically. Commercial films are not used to any extent. Prospects for selling films or equipment to schools are not encouraging at present, but as conversations with educational leaders continue, it may be possible that the Government will begin to seek out film and equipment suppliers in order to begin development of this field.

Ecuador

The Ministry of Education has been entirely too restricted financially to be able to include the purchase of motion picture equipment and the showing of educational motion pictures in its program. Considerable interest has been shown, however, both by the public and private schools in educational films lent or exhibited through the courtesy of other groups, especially recently through the courtesy of the cultural officer of the American Embassy and the local Coordination Committee.

Ecuadoran educators are quite aware of the value of exhibiting and using educational motion picture films for pedagogical purposes and unanimously lament the financial stringency that makes impossible a greater employment of this educational medium. The Jesuit and Christian Brethren schools have silent equipment for showing films and show occasional ones of religious import, usually by the Papal Nuncio. The Military College has excellent 35mm. sound projection equipment of American manufacture.

The Military College is said to have a small film library, a present from the German legation, and has occasionally rented other films for showing to its students. A few schools are reported to have 16mm. projectors, but it has not been possible to secure any description or list of these.

Slide films are not used to any appreciable extent by schools in Ecuador and slide film libraries are negligible. No government educational office maintains a film library.

The government produces no educational films, although a propaganda film for use by the Tourist Bureau was ordered produced by the government some years ago. No educational or commercial films are produced domestically. A few commercial films are produced domestically. A few commercial films have been used for advertisement purposes in theaters, chiefly in Guayaquil and in neighborhood houses. The prospect for selling films or equipment to educational institutions is very poor owing to the very difficult financial situation of the Ministry of Education.

El Salvador

The Ministry of Public Education of the Republic of El Salvador has an educational film department which has charge of showings of pictures in all public schools of the Republic.

Seven schools use films for teaching purposes, and four schools maintain film libraries. No 35mm. projectors in use, but eight silent and one sound 16mm. projectors are in use. Slide-films are used by schools to a slight extent, but very few schools maintain slide-film libraries. Film libraries are maintained by the Government Educational Office which produces some educational films, but not on a large scale.

There is at present very little market for the sale of equipment for the showing of educational films and the market for the films themselves is small as yet. This market will probably increase slowly during the next few years.

Guatemala

Although the Guatemalan Government has issued regulations lowering the duties on educational films, little has been done along the line of visual instruction in schools and colleges through the use of educational motion pictures. Lack of funds for public schools will undoubtedly prevent any such steps being taken in the immediate future, and private schools are not in a position to install such equipment. There seems to be, therefore, very little opportunity for developing this branch of motion picture distribution in Guatemala. Only two schools are known to have motion picture projectors, and their equipment is the standard 35mm. silent equipment. The schools are the Central High School for girls and the Cathedral School of the Archbishopric of Guatemala, and so far as can be ascertained, films are shown principally for entertainment.

The theaters use the standard 35mm. equipment and 34 of them have sound equipment. The local Coordinator of Inter-American Affairs has two portable 16mm. projectors with sound equipment and makes regular showings of educational films at all the schools. These showings have been very well received and have had considerable favorable comments from the authorities, press, and audiences.

According to local dealers in photographic supplies and equipment, approximately seventy-two 16mm. silent projectors have been sold here in the last ten years, and many of these are old models and not in use. All purchases have been made by individuals, and in view of the small number of persons who can afford this luxury, the market for this line is very limited. The market for 8mm. silent equipment appears to be better, since there are more people who can afford the lower price of the film and equipment.

Haiti

Educational institutions in Haiti are but slightly interested in the use of films for teaching purposes. The Medical School in Port-au-Prince and Agricultural School at Damien are the only educational institutions using films at present. They have 16mm. sound and silent projectors, but limited budgetary allowance prevents purchase of films for the establishment of a library. United States Government films are borrowed from time to time and are very well received.

(Continued on Page 64)

Scenario for Interior Lighting

(Continued from Page 49)

to double expose the scenes of which the man is thinking. Allowing a few seconds at the beginning of the scene fade-in a shot of the man bending over the girl's body and fade out. Allow a few seconds before fading in two consecutive shots of newspaper headlines reading to wit

"Police probe girl's mystery death," and "Solution near in girl saying"

You can easily obtain headines of th's kind in newspapers in a short space of time. After fading these headlines in and out, allow another brief lapse and then fade-in a shot of a revolver, denoting the man's intention of suicide. After this last fade-out, the balance of the scene will carry on with the close-up of the mans' face registering fear and anxiety. Then cap the camera lens and roll the balance of the film through the camera and remove for processing.

In this picture the drama and suspense can be accentuated by the proper use of lighting effects. Black shadows and weird lighting employed in the hotel room sequence will greatly add to the effect on the audience. Take great care in the double exposure and don't let your actors emote too unnaturally in order to avoid any chance of placing a stigma of amateurism in the scenario.

Plan each shot and its action before shooting and ascertain if the lighting effects are what you desire.

This scenario is difficult and requires intense study and thought, but the results will repay your efforts. You can always get the co-operation of police officers when you expain that they will appear in a motion picture. I know, because I filmed this scenario and the officers want to appear in more pictures.

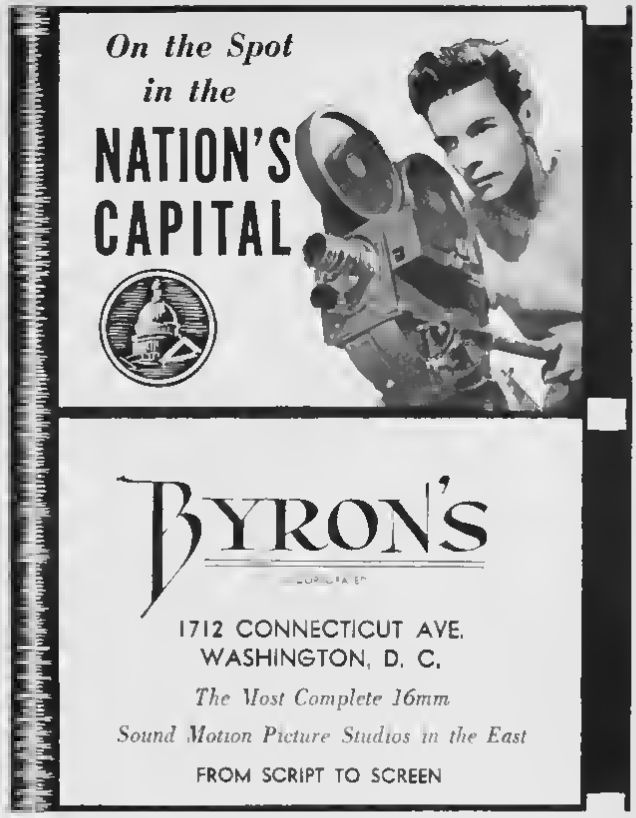
Film Review

(Continued from Page 60)

is to buy War Bonds—A War Bond poster is then shown, followed by a clever sequence that is evidence of the filming ingenuity of this producer. He is seen making out checks, then comes some expert double exposures of tanks, planes and guns against a dark background, as War Bonds float down. The climax comes when a Jap flag is burned up.

This is a well conceived and efficiently executed "home movie" completely titled, and should rate high among the top entries of any contest.

EDWARD PYLE, JR.



Bell & Howell Announces New Educational Films

A group of educational films produced and heretofore distributed by the University of California, will henceforth be rented and sold through the Bell & Howell Company Filmosound Library. Included in the group are some of the most significant school-made films, dealing with widely varying subject matter. The list includes:

Nursing—A Career of Service
No. X960 Silent Monochrome 28 min. $2
No. CX960 Silent Color. 28 min. $6

Step by step progress of student nurse. Excellent for vocational and social studies.

Springboard Diving
No. 961. 10 min. $1.50

Champion mermaids demonstrate all the standard competition dives in normal and slow motion sequences.

Technique of Foil Fencing
No. X962 Silent. 15 min. $1

Expert instructors demonstrate classic movements of offense and defense. The importance of poise, form and agility in this sport.

Making a Stained Glass Window
No. C963 Color Sound. 20 min. $6

A comprehensive and beautiful process film showing each step in the making of large stained glass windows, using American materials and craftsmanship.

The Horse in North America
No. C964 Color Sound. 20 min. $6

Paleonthological research, fills in the natural history of the horse on the North American continent.

The American Horse
No. C965 Color Sound. 21 min. $6

Outstanding representatives of all leading breeds, their pedigrees and functions. Excellent complement to The Horse in North America.

'Saludos' In Swedish

Donald Duck and Jose Carioca are going Swedish in "Saludos Amigos." A complete Swedish adaptation of the Walt Disney Latin American musical feature has been made and dubbing started at the studio recently.

What It Takes to Be a Cameraman

(Continued from Page 48)

Every ace cameraman must, of course, be a sculptor, or if you wish, a plastic surgeon And though he works with lights and shadows instead of chisel or scalpel the results he is frequently called upon to achieve are no less remarkable —or artistic Aging favorites continue to appeal largely because of this plastic skill of cameramen who are able to "hide" the blemishes that time or illness leaves on these favored faces no less than it does on ordinary mortals

Finally, having achieved recognition for his work, a cameraman must guard against becoming too methodical; in the sense that his work becomes typed Within the elastic framework of the fundamentals of his profession he must continue to experiment The good cameraman is he who dares Like all other creative work his will be better for spontaneity and nuance He will be defeated in this objective if he is forced to turn out motion pictures on a mass-production method. No cameraman can go on endlessly from one picture to another without sacrificing something of the picture and of his professional self

Post-War Visual Education Potentialities

(Continued from Page 62)

Honduras

The only commercial films known to be shown in Honduras are those exhibited by Sterling Products, International This film uses mobile equipment which travels constantly throughout the Republic, giving exhibitions in many places where there are no regular movies.

There have been no development within the country along the lines of educational motion pictures, and none are distributed in the schools The Coordination Committee for Honduras in cooperation with the Legation puts on shows three times weekly in Tegucifalpa using films furnished by the Coordinator of Inter-American Affairs. Most of these are of an educational nature

Mexico

There is no production of educational or commercial films in Mexico However, a certain number of educational films have been brought in by various industries operating in Mexico and a limited number have been distributed through the American Embassy by the Office of the Coordinator of Inter-American Affairs For the most part, the educational films are 16mm films and are usually not shown in the regular motion picture theaters, but are rather shown in clubs and recreation halls, as well as by sound trucks traveling through the country Thus far the number hos been very small but there appears to be considerable interest on the part of the public, particularly when no admission is charged, for travel films and features showing the development of the war industries in the United States.

Comparatively little development has taken place in Mexico in the screening of 16mm. motion pictures So far as is known, only the new General Hospital has any 16mm. equipment. It is using it for teaching medical and operating technique. No other hospitals, churches, schools, colleges, prisons, or other institutions of the Government are so equipped This is not due to lack of interest, as the Government has made inquiries from time to time but for one reason or another has not been able to obtain any equipment. Educational institutions are particularly interested in the medium but the Government cannot furnish them with the necessary equipment. It may be said, therefore, that there is a potential market in Mexico for educational motion picture services

There are some 16mm projectors, both silent and sound, in Mexico. *The American Photo Supply Company* and one or two others have sold up to 6 kodascopes or 16mm. sound projectors This is said to be amateur type apparatus and the supply of cameras and projectors is running low. There are not more than 50 silent equipments of this type in the city. The *Cinematografic- y Commercial de Mexico* has disposed of 16 sets in the past 5 years. Occasionally 16mm. apparatus is assembled locally on special order, but such equipment is of doubtful performance and there are but few in use and none on hand

Nicaragua

There have been no developments in the showing of educational films in Nicaragua and no indication that educational institutions are contemplating the early use of such films for teaching purposes There appear to be small immediate prospects for the sale of the 16mm. silent and sound projectors. There are relatively few projectors in the country and virtually all of them are privately owned.

Panama

It is estimated that there are about two hundred 16mm projectors in Panama and that practically all of these are silent

The Educational Film Program of the Office of the Coordinator of Inter-American Affairs involves the distribution to the twenty Republics of Latin America of selected 16mm films on a wide range of subjects These are shown to relatively small audiences in schools and public buildings (In Panama the Embassy has given several such showings recently) The Embassy suggested to the Coordinators Office some time ago that these educational shorts would

FOR LIGHT ON EASTERN PRODUCTION--

C. ROSS

For Lighting Equipment

As sole distributors East of the Mississippi we carry the full and complete line of latest-type Inkie and H.I.-Arc equipment manufactured by

MOLE-RICHARDSON, Inc.

Hollywood - California

Your requirements for interior or exterior locations taken care of to the last minute detail anywhere

☆

MOTOR GENERATOR TRUCKS

RENTALS SALES SERVICE

☆

CHARLES ROSS, Inc.

333 West 52nd St., New York, N.Y. Phones: Circle 6-5470-1

reach a far greater audience in Panama (an estimated eighteen million a year) if the 16mm. films were "blown up" to the 35mm. size for presentation at regular motion picture theaters. Exhibitors would be only too glad to include them on their program.

The Embassy has three 16mm sound projectors which are used to show educational shorts in schools and public buildings under the Educational Film Program. In addition, *Kodak Panama, S. A.*, has a 16mm sound projector which is loaned out to interested groups. All other 16mm projectors are not equipped for sound, and are privately owned.

There are no projection apparatus in schools or public buildings.

Paraguay

Educational motion picture films are not in use. Educational institutions are thinking along these lines but nothing has been done so far. No schools or colleges use films for teaching purposes and film libraries are not being maintained. There is one 35mm. sound projector in use and about three 16mm. silent projectors in the schools of Paraguay. There are no slide-films used in the schools and the Government does not maintain film libraries nor does it produce films. Prospects for selling films or equipment to educational institutions are fair. They might be interested if they had an opportunity to see films which met their particular needs from both the subject and language standpoints.

Peru

There has been considerable development during the past two years in the showing of educational motion picture films. The Peruvian Government has created in the Ministerio de Educacion Publica a bureau known as the Direccion de Extension Cultural Artists, under which bureau is a section known as the Seccion Radio Fusion y Cine Educativo. This bureau has issued some propaganda pamphlets with a view to encourage visual education in Peruvian schools and colleges. This bureau has at its disposal a sound truck, employing a full time operator, which was presented to the Government by the International Petroleum Company. The Government, in cooperation with the office of the Coordinator of Inter-American Affairs, is now showing educational films in schools and colleges, clubs, and in the public squares of the principal provincial towns throughout the republic. The subject of employing motion pictures in schools instruction as an intricate part of its curriculum has been under discussion in Government circles for a number of years but no definite, permanent program under Government direction has materialized to date. There are no schools or colleges that maintain film libraries but the Coordinator's office will supply educational films upon request. It is estimated that there are about 400 35mm. sound projectors in use. As far as could be determined, there are seven 16mm sound projectors in operation in Peru.

Silent 16mm. projectors are, with few exceptions, owned by private individuals. The number in service has been estimated to be about 400. Several mining companies, medical societies, and government departments have purchased 16mm projectors for the purpose of showing educational, industrial, and professional films. The number of 8mm projectors in use is estimated to be about 250. Slide-films are not used in Peruvian educational institutions. The only educational-commercial film made in Peru in recent years was one produced under the auspices of the International Petroleum Company of that company's organization in Talara. This film was produced by an American company.

Few educational and documentary films are publicly shown, but there has been a tendency for some of the larger American firms to accompany their sales campaign in this country with film presentations, and some progress has been made by the government in the use of educational films in institutions of higher learning in Peru. Most of such films are of American origin and have relatively little propaganda effect.

Uruguay

Considerable progress has been made in the showing of educational films. About four films are shown each year on 35mm. stock by the Seccion Cinematografia del Ministerio de Instruccion Publica, which has shown about 50 films since its establishment in 1922. About three films are shown per year on 16mm. stock by Seccion Cinematografsfia de Ensenanza Frimaria y Normal.

The University of Montevideo is the only institution of education which uses films for instructional purposes. These institutions do not maintain film libraries although small collections have been accumulated by the American Embassy and the British Legation. The Ministry of Public Instruction maintains a film library for motion picture films.

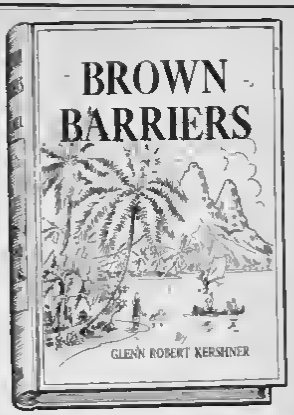
Educational institutions are interested in the showing and development of visual education. 16mm projectors are used primarily in private homes. Very few standard-sized projectors are to be found in schools, public buildings, or other locations. It is estimated that there are 553 silent 16mm projectors in Uruguay. There are 21 sound 16mm. projectors in Uruguay.

There is a potential market in Uruguay for the sale of motion picture equipment and films to the educational institutions in the country. Inquiry in this regard should be directed to the Ministerio de Instruccion Publica or to the University of Montevideo, or to the American Embassy.

Venezuela

The Venezuelan Ministry of National Education instituted a program for the showing of educational films in the schools several years ago, but due to

(Continued on Page 68)



A Fascinating Realistic Story Of The South Seas

The Author of 'BROWN BARRIERS spent many years in the South Seas long enough to know the natives and the islands intimately. He selected the inspiring island of Bora Bora one of the Society Group for the background of this intensely interesting and authentic travel novel.

It was here in 1856 that a small boatload of men and a lone woman survivors from the wrecked clipper ship Norbert K., worked their way through the opening in the foaming reef to what destiny held in store for them — Love laughter hate and romance told in gripping dramatic style.

Kershner is at his best in writing of the sea and of ships that go down to the sea. His account of a storm on the briny deep is the most realistic that this reviewer has read.'—H. C. S., Ohio Arch. and His. Quarterly, Vol. 50—No. 4 (Oct. Dec. 1941).

'The author weaves a tale so vivid that the reader paces holy stoned decks, and tosses copper pennies with deck hands praying for winds to fill empty sails.'—Virginia Hall Trannett, Cal. Eve. Dispatch, Columbus, Ohio.

Author's limited autographed First Edition
Stiff covers bound in rich brown cloth embossed in gold
341 pages 8½ x 5½.
Illustrated with 71 pen drawings by author
Complete glossary
Privately published. Supply limited
Price $3.50 Prepaid

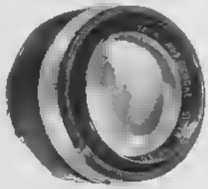
•

GLENN ROBERT KERSHNER

4245 BALDWIN AVE. CULVER CITY, CALIF.

GIVE!
Remember the Red Cross

Scheibe's FILTERS
In World-Wide Use
GRADUATED FILTERS - for Moonlight and Night Effects in Daytime Diffused Focus and Fog producing Filters The Original Monotone and many others
WRITE FOR FOLDER
SINCE 1916
George H. Scheibe
ORIGINATOR OF EFFECT FILTERS
1827 WEST 78TH ST LOS ANGELES CAL


A LONG-TERM INVESTMENT
B&H Taylor-Hobson-Cooke Ciné Lenses will serve you for many years, because they anticipate future improvements in film emulsions and *exceed* current technical demands Write for literature BUY WAR BONDS
BELL & HOWELL COMPANY
Exclusive world distributors
1848 Larchmont Avenue, Chicago
New York 30 Rockefeller Plaza
Hollywood 716 N La Brea Ave
Washington, D C 1221 G St, N W
London: 13-14 Great Castle St

Experts Convene At Nela Park

TO devise a suitable 16mm sound motion picture projector for military needs, thirty-five experts from the film industry and the armed forces held a 3-day meeting with General Electric engineers at GE's Nela Park, Cleveland, Jan 11, 12, and 13.

It was the initial meeting of this newly established branch of the War Standards Committee on Photography and Cinematography

Host to the group was Frank E Carlson, illuminating engineer at Nela Park Representatives hailed from various parts of the country· from the Army, Navy, and Marines, from leading makers of projector equipments and motion pictures, from film processing laboratories; from the Society of Motion Picture Engineers, and, from GE's Nela Park engineering division

"At present, there just isn't any adequate 16mm military projector to meet the special requirements of the armed forces to train educate, and entertain troops here and over-seas by way of the motion picture" So said Capt Lloyd T. Goldsmith of the Army Signal Corps at the meeting.

Among manufacturers represented were these firms. Bausch and Lomb Optical Co , Eastman Kodak, National Carbon, Bell & Howell, DeVry, RCA: Ansco, and Ampro.

Others from the armed forces were Lt Gordon A Chambers, USNR, Naval Air Station in Washington, and Lt J L. Lesser, USMCR Serving as chairman was RCA's Production Manager A. G Zimmerman, Indianapolis Representing the Society of Motion Picture Engineers was D E. Hyndman of Eastman Kodak Secretary of the meeting was J. W. McNair, electrical engineer of the American Standards Association

It is expected that the specifications drawn up at this first meeting of the industry division will be adopted at a subsequent meeting to be held in the near future

A. W. Gelbke New Chief Engineer for E. Leitz, Inc.

According to an announcement by Charles E Kidner, General Manager of E. Leitz, Inc., Arthur W Gelbke has been appointed Chief Engineer of that firm Gelbke has a long and impressive engineering record He was formerly Director of Engineering for the American Type Founders, and in that capacity supervised engineering on contracts totaling about $75,000,000 His background also includes service as Electrical Engineer in charge of the Department of Public Works of New York City, and the supervising and designing of many projects in South American countries

RENTALS SALES SERVICE
MITCHELL Standard, Silenced, N C., Hi-Speed, Process, and Eyemo Cameras BELL & HOWELL
Fearless Blimps and Panoram Dollys—Synchronizers—Moviolas
35mm Double System Recording Equipment
WE SPECIALIZE in REPAIR WORK on MITCHELL and BELL & HOWELL CAMERAS
FRANK ZUCKER CABLE ADDRESS CINEQUIP
CAMERA EQUIPMENT CO.
1600 BROADWAY N.Y.C. CIRCLE 6-5060

Auricon SOUND CAMERA

for 16 mm sound-on-film

★ High Fidelity Sound

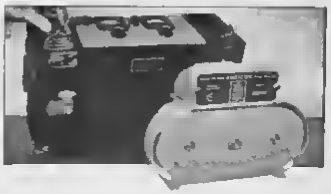
★ Self contained in sound proof "hump."

★ Minimum equipment maximum portability. Camera and Amplifier, complete, weigh only thirty-seven pounds

★ Kodachrome or black and white pictures with Auricon sound track will reproduce on any sound-film projector.

★ Can be operated in the field from an Auricon Portable Power Supply.

★ Auricon Camera with type "C" lens mount (but without lens) and Amplifier complete with microphone, instructions and cases $880.00



AURICON 16 mm RECORDER

★ Variable-area sound on film, for double system recording with a synchronous motor driven 16 mm camera. Amplifier has background noise reduction and mixers for combining speech and music. With dynamic microphone, instructions and cases for Recorder, Amplifier, Accessories . . . $695.00

★ Auricon 16mm. sound-on film recorders and cameras are serving the National War effort with Military and Government Film Units, and with civilian organizations producing essential morale and industrial training films. If your work in such fields makes you eligible to purchase new equipment, we invite you to let our engineers show you how Auricon portability and professional performance will simplify your recording problems.

AURICON *Division,*
E. M. BERNDT CORP.
5515 SUNSET BLVD. HOLLYWOOD, CALIF.

MANUFACTURERS OF SOUND-ON-FILM RECORDING EQUIPMENT SINCE 1931

GOERZ

"Goerz American"
CRAFTSMEN
are doing
their share—

The production line of "GOERZ AMERICAN" is formed by skilled men, who through painstaking work create high-grade photo lenses and optical units for military instruments used by our armed forces

on Land—
on the Sea—
in the Air—

These precise optical units are of the greatest importance to our armed forces, for without accurate military instruments for sighting, fire control and photographic aerial reconnaissance their fighting machinery would be of little value to them.

Optical science together with our craftsmen, doing their duty on the job in the production line, will hasten victory.

Our production is keyed to fill the requirements of our Government, and of others on orders with priority certificates "GOERZ AMERICAN" lenses for civilian use will again be available after Victory

To hasten Victory—
INVEST IN WAR BONDS

C. P. GOERZ AMERICAN OPTICAL CO.
Office and Factory
317 East 34th Street, New York 16, N. Y.

"Goerz American"
PRECISION OPTICS
since 1899

AC-2

Post-War Visual Education Potentialities

(Continued from Page 65)

lack of funds the program has never attained any substantial development The work that has been done along these lines has been confined largely to Caracas and a few neighboring states So far as can be ascertained, no 35mm or 16mm. projectors are in use by the government. Schools do not have their own projectors. The Educational Radio service of the Ministry of Education has, however, twelve 16mm sound projectors which it makes available, together with competent operators, to schools who are interested. Special showings for student groups are also given at some theaters in Caracas

The Ministry of Education follows a policy of sending films to technical supervisors in the different States of the Republic who arrange for their projection with equipment provided by the State Government

It might be said that educational institutions in Venezuela are thinking along the lines of the possibilities offered by "visual education," but that until the present time funds have not been available which would make possible the development on a fairly large scale of any such program However, the Office of the Coordinator of Inter-American Affairs is carrying out a program of distribution of educational films as well as other types, together with projection equipment, to the various countries of South America This program should materially enhance the interest in an appreciation of the opportunities afforded by educational films and should have a favorable effect on a possible market in this country for such equipment after the war

There are some slide projectors (for glass lantern slides) in several of the experimental schools in Caracas, but their use is not widespread in other parts of the country No extensive film libraries are maintained by either the schools or the Government Educational Offices

The Government has produced several educational, or documentary, films in Venezuela which were of good quality. These films, three in number, were produced in Venezuelan studios which have shut down, and no important documentary or educational films have been produced by the Government since

Many of the large American firms in Venezuela, representatives of American automobile companies, electrical companies, and so on, make extensive use of educational films, both motion and slide, in their programs of employee-training.

The Coordinator of Inter-American Affairs have 182 16mm sound projectors, distributed in Latin America as follows

	16mm Sound Projectors	Mobile Trucks
Argentina	6	2
Bolivia	2	
Brazil	24	
Chile	9	5
Colombia	7	10
Costa Rica	2	1
Cuba	10	5
Dominion Republic	3	1
Ecuador	5	3
Guatemala	3	1
Haiti	2	
Honduras	2	1
Mexico	15	26
Nicaragua	2	1
Panama	3	
Paraguay	2	
Peru	5	4
El Salvador	3	3
Uruguay	3	2
Venezuela	5	4

Western Electric Offers Awards for New Ideas

Recognizing the importance of obtaining every possible idea that might result in increased war production, the Western Electric Company, leading manufacturer of electronic communications equipment for the Armed Forces, has amended its long-standing employee suggestion system to provide cash awards ranging from $5 to $1,000, effective January 1st, 1944

Western Electric employs in the neighborhood of 80,000 communications workers at three main Works' locations situated at Chicago, Ill., Kearney, N. J., and Baltimore, Md. and in distributing houses and installation forces throughout the country.

Awards are to be made for adopted suggestions relating to any phase of the Company's operations Where the application of a suggestion will result in measurable savings, the award will be 10 per cent of the savings in material and labor estimated to result during the first year's application of the suggestion. Awards will be computed to the nearest $5 and will range, as previously stated, from a minimum of $5 to a maximum of $1,000 A minimum $5 award will be made for adopted suggestions for which savings cannot be measured in dollars and cents, but outstanding contributions in this class will be granted higher awards

CAMERA SUPPLY COMPANY
ART REEVES
1515 North Cahuenga Boulevard
HOLLYWOOD Cable Address—Cameras CALIFORNIA
Efficient-Courteous Service New and Used Equipmnt
Bought—Sold—Rented
Everything Photographic Professional and Amateur

Aquiring Balance in Color

(Continued from Page 47)

the fact that the red of the letters and the yellow of the background were both of the same value in depth of color. My friend had spent many hours assembling, shooting the titles and splicing them in their proper places but when projected on the screen, the colors merged making the title illegible. Not realizing the true cause of his mistake, he shot them again, thinking that his first exposure might have been wrong. The result was no better. If his background had been lighter thus giving greater contrast between the two colors, or, better still, had he used a more neutral hue, such as a grey, a legible and attractive title would have captivated the eye of his audience.

The complimentary color green could also be used successfully with red letters provided care is taken to select a green of high value and weak chroma.

A title using a deep red background with light yellow letters, shadowed in black, is very effective. I used this for a dramatic main title and the result was quite pleasing. The main and end titles for another picture were composed of a medium blue background with a yellow cutout and white metal letters, the white letters neutralized the brilliance of the opposing colors. The fundamental hues of the spectrum are not easily combined in titles or any other closeups that fill the screen unless a third color is added as a harmonizing medium. It is much safer to use subdued hues, or, as has been expressed, hues of weaker chroma.

Colors need not be bright, we have seen subdued tones and soft effects used advantageously in some very outstanding work. Through experimentation with color, many delightful effects can be obtained which will enrich our films. Titles will have greater appeal—they can be made to express the mood of the picture, and the film in general will take on the appearance of a finished product. Once we have become familiar with the principles of color harmony, new horizons will be open to us.

Try composing for color; large areas of pastel shades with small areas of bold color. Remember your simple color harmony, balance cold color against warm color, light shades against dark shades, small areas of strong color against large areas of weak color. It is not difficult as it first seems, and pays big dividends in the final result.

New Filmsound Releases

Pardon My Sarong (Universal) 10 reels. Rental $20

The nation's two foremost screwball comics have done it again on a bigger scale! Marooned on a South Sea Island, they cram side-splitting fun, romance and adventure into a prize example of pure escapism. (Abbott and Costello, Virginia Bruce, Robert Paige) Available from February 7, 1944, for approved non-theatrical audiences.

Gateway North. Silent-Color 15 min. Rental $3.

Initial stages of new roadway through British Columbia toward Alaska. Three main stages of social progress side by side: hunting, agricultural, industrial. Breath-taking scenery, in gorgeous color. (Karl Robinson)

RUBY CAMERA EXCHANGE

Rents . . . Sells . . . Exchanges

Everything You Need for the

PRODUCTION & PROJECTION

of Motion Pictures Provided by a Veteran Organization of Specialists

35 mm. . . . . 16 mm.

IN BUSINESS SINCE 1910

729 Seventh Ave., New York City

Cable Address: RUBYCAM

TELEFILM INCORPORATED

Direct 16 MM SOUND

USED BY:

- Douglas Aircraft
- General Elec. (Welding Series)
- Boeing Aircraft
- North American Aviation
- U.S. Dept. of Interior
- U.S. Dept. of Agriculture
- Santa Fe Railroad
- Washington State Apple Commission
- Standard Oil of Calif.
- Salvation Army

and Many Others

A BETTER JOB FASTER— MORE ECONOMICAL

TELEFILM INCORPORATED

6039 Hollywood Blvd., HOLLYWOOD, CALIF.

GLadstone 5745

BUY MORE WAR BONDS

New Precision Products from

KALART

available on suitable priorities

NEW Model "E-1" Range Finder with war-time improvements. New FOCUSPOT for automatic focusing in the dark. And improved Master Automatic Speed Flash. Write for full information. The Kalart Co., Inc., Dept. 12, Stamford, Conn.

8 Enlarged TO 16 Reduced TO 8

Geo. W. Colburn Laboratory

Special Motion Picture Printing

995 MERCHANDISE MART CHICAGO

MOVIOLA

FILM EDITING EQUIPMENT

Used in Every Major Studio

Illustrated Literature on Request

Manufactured by

GENERAL SERVICE CORPORATION

Moviola Division

1449 S. Gordon Street Hollywood 28, Calif.

FAXON DEAN INC.

CAMERAS

BLIMPS-DOLLYS

FOR RENT

Day, NOrmandie 22184

Night, SUnset 2-1271

4516 Sunset Boulevard

Don't forget to visit your nearest Blood Bank. A pint of YOUR blood may save a Life —GIVE.

Eastman Sponsors Campaign of U. S. Cadet Nurse Corps

In support of the campaign for 65,000 recruits to the U. S Cadet Nurse Corps, Eastman Kodak Company is sponsoring a series of full-page advertisements in national magazines starting late in January and continuing through May.

The future in nursing is the theme of the series which will run in 15 magazines with an average monthly circulation of twelve million

Prominently featured are Kodachrome (full color) reproductions of the Cadet Corps' outdoor uniform for winter wear, selected by a jury of New York fashion editors, from designs submitted by prominent New York stylists

The urgency of the Nurse Corps campaign is indicated by a statement from Dr Thomas Parran, surgeon general of the U S. Public Health Service, who says: "There is a dangerous shortage of nurses today With thousands called to service in the armed forces and civilian hospitals, war plants, clinics and public health centers, nurses in increasing numbers are needed at once"

In a letter to Thomas J Hargrave, president of the Eastman Kodak Company, Dr. Parran writes, "The action of your company in devoting its energies to the task of recruiting nurses for the U S. Cadet Nurse Corps is a distinct war service for which I am most grateful" while T. S. Repplier, general manager of the War Advertising Council, terms the series "one of the most outstanding examples to date of all-out support of a government program by a leading advertiser"

Lucile Petry, director of the division of nurse education of the Health Service, points out that the demand for graduate nurses will continue to grow even after the war, adding there has never been enough nurses to meet the demands

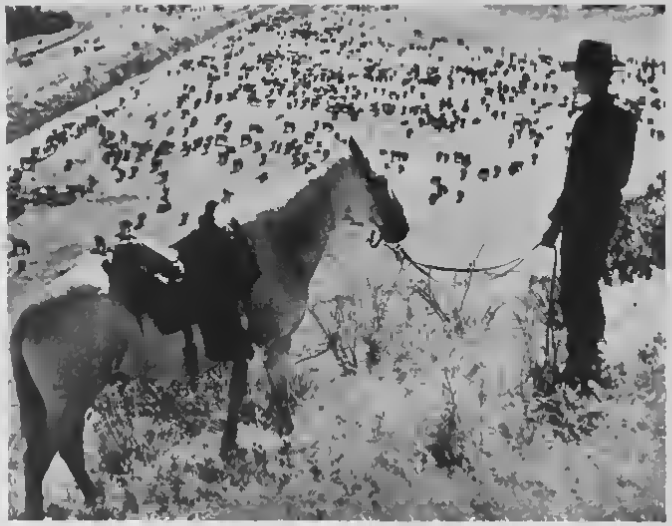
The agency is the J Walter Thompson Company

War Worker Donates Tenth Pint of Blood!

Wilbur Chilson, Night Superintendent at the Rockwell plant of Bell & Howell Company, donated his tenth pint of blood this week to the Red Cross Mobile Unit stationed at Paul Revere Park Mr Chilson made his first contribution to the blood bank in April, 1942, and has since donated until his is an outstanding record of selfless giving Although as many as 12 pints of blood have been donated by one person, Mr. Chilson's ten pints, that might mean the difference between life and death for men on our fighting fronts, were contributed in one year and eight months, and he's still going strong!

Give to the RED CROSS

ON GUARD



CLASSIFIED ADVERTISING

FOR SALE

WE BUY, SELL AND RENT PROFESSIONAL AND 16mm EQUIPMENT NEW AND USED WE ARE DISTRIBUTORS FOR ALL LEADING MANUFACTURERS. RUBY CAMERA EXCHANGE, 729 Seventh Ave., New York City Established since 1910

IMPROVED DUPLEX 35MM PRINTER with two Bell-Howell Cams and Shuttles Perfect Registration for Color or Black and White, and process plates Also Bell-Howell Step Printer with Registration Pins Ideal for duplication 35 MM HOLMES AND DEVRY Portable Sound Projectors Hollywood Camera Exchange, 1600 Cahuenga Hollywood

FRIED LITE TESTER
In like new condition
CAMERA EQUIPMENT COMPANY
1600 Broadway New York 19, N. Y.

LARGE ASSORTMENT COOKE, ZEISS, ASTRO LENSES 16mm RECORDING CAMERA, DOUBLE SYSTEM AMPLIFIER, MICROPHONE, CABLES AND BATTERIES 1942 MODEL LIKE NEW, $995.00 BELL AND HOWELL 35mm EYEMO CAMERA THREE LENSES $1,175.00 REDUCTION PRINTERS FROM $750 PLENTY 16mm SOUND PROJECTORS $225.00 UP S.O.S. CINEMA SUPPLY CORPORATION NEW YORK 18

EQUIPMENT Factory Reconditioned 3 speed Eyemos single also Turrets B&H Standard 4 lenses motor Tripod finder 3 magazines cases $2560 16mm High Speed printer complete Cine special 4 lenses optical finder Tripod case latest model Portable sound projectors Moguls 67 West 48th St New York 19

WESTERN ELECTRIC Double System 35mm Sound Editor Holmes 16mm Portable Sound Projector 1000 watt Holmes 16mm Sound Projector Low Intensity Arc Booth Type Duplex 35mm Sound and Picture Printer Akeley Camera 15 50-100 150-180-421mm lenses 5 magazines motor Tripod many attachments DeBrie Camera Model L new Lachsmeter friction and crank tripod 110 volt motor Mitchell type mounts magazines

WE BUY TRADE—SEND US YOUR LISTS CAMERA MART 70 West 45th St New York City

EYEMO MODEL 71-C speeds 4-6-8-12-16-24-32 Type C3 Lens Turret Hand Crank variable viewfinder with case 47mm F2.5 and 6" F4.5 Taylor-Hobson Cooke Lenses New condition—never used Cash sale only Also ASTRO Portrait F2.3 150mm Lens reflex mount for 45mm camera and also for 16mm B&H Magr Pancake Hogansburg New York

WANTED

WANTED TO BUY FOR CASH
CAMERAS AND ACCESSORIES
MITCHELL, B & H, EYEMO, DEBRIE, AKELEY
ALSO LABORATORY AND CUTTING ROOM EQUIPMENT
CAMERA EQUIPMENT COMPANY
1600 BROADWAY, NEW YORK CITY, 19
CABLE CINEQUIP

WE PAY CASH FOR EVERYTHING PHOTOGRAPHIC Write us today Hollywood Camera Exchange 1600 Cahuenga Blvd Hollywood

WE BUY—SELL—TRADE ALL MOTION PICTURE EQUIPMENT, SOUND AND SILENT SEND YOUR LIST THE CAMERA MART, 70 WEST 45TH ST., NEW YORK CITY

CONVERT TO CASH—BUY BONDS—WE'LL TAKE ANY MAKE 35MM OR 16MM SOUND PROJECTORS CAMERAS PRINTERS RECORDERS OR WHAT HAVE YOU? S.O.S. CINEMA SUPPLY CORPORATION NEW YORK 18

PHOTOGRAPHY'S "SECOND FRONT"

More than a hundred war products now made of material developed for a better Kodak Film

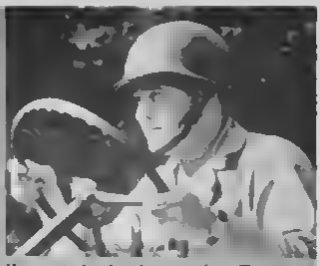
FILM BASE IS A PLASTIC—one of the earliest. To make a better film, Kodak long ago began producing from cotton linters a "miracle material": cellulose acetate.

In the form of TENITE—made by Tennessee Eastman Corporation, a Kodak subsidiary—this plastic is tough as a steer's horn and lighter than wood. It can be molded under heat or pressure, or "machined" like lumber or metal. It can be clear transparent, or in an unlimited range of colors.

Tenite is molded into finished products at the fastest rate ever reached with plastics. It led to a minor "industrial revolution" before the war or wartime shortages were dreamed of . . .

Now it has more than a hundred war applications—not as a substitute, but as a superior material. As an extra advantage, it does supplant other "critical" materials.

A few war uses are illustrated . . . In a sense, they all started with photography—the ever-growing need for finer film . . . Eastman Kodak Company, Rochester, N. Y.



He controls the Jeep with a Tenite steering wheel—strong, tough, and able to stand all climates. Your own car probably has a Tenite steering wheel, instrument panel, accessories.

His bayonet scabbard is Tenite—lighter, tougher, more easily cleaned. Cost is little more than half that of scabbards made with earlier materials.

Snake-bite kit supplied our troops by the Army Medical Corps includes vacuum pump—molded of Tenite—for extracting snake venom.

REMEMBER TORPEDO SQUADRON 8? *how knowing exactly what the odds against them were, this heroic band of 30 Navy fliers drove unswervingly into the massed fire of the Japanese fleet off Midway? And only one man survived? A stern example to us at home* **BUY MORE WAR BONDS.**

Doubles for brass—Before acceptance by the Army, this bugle—molded of Tenite—won the most critical ears by its tone and range.

Kodak

Today... a camera is a *WEAPON!*

Filmosound V — 16mm Projector

Movie cameras just like the Filmo model you make your films with, projectors like the Filmo you have . . . they're *weapons.*

Cameramen in uniform on every battle front are filming the steady advances of our forces . . . recording an on-the-spot history of this war with Filmo Cameras.

And in camps . . . Filmo Projectors are helping in the tremendous task of training. In fighting ships . . . on battle fronts they're flashing Hollywood's best offerings on screens to give tired fighters an hour of fun and relaxation.

But that's not all . . . *other* instruments, strange *new* ones, now bear the B&H name, too. And *they* are weapons . . . bomb sights . . . tank periscopes . . . gun cameras . . . and sighting devices for a host of grim war tasks.

These are the reasons why you can't buy new B&H equipment. It's simply that they're WEAPONS now.

Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London. *Established 1907.*

movies.

These Are Not Rationed

Never busier, never better stocked with grand titles, Filmosound Library offers you uncounted hours of fun with your projector. Send for the complete catalog and build the movie program *you'd* like.

★ ★ ★

*Optronics is OPTics | electrONics | . . . mechanICS

It is research and engineering by Bell & Howell in these three related sciences to accomplish many things never before obtainable. Today Optronics is a WEAPON. To morrow, it will be a SERVANT to work, protect, educate, and entertain

*Trade mark registered

. . . but Here's a Promise

The day *will* come . . maybe sooner than we think . . . when we'll all be back at our *peaceful* jobs again. And when we *are* . . . you can be *sure* that there'll be *no* smallest piece of B&H equipment hurriedly built to meet the pent-up buying "splurge." Every B&H Camera and Projector and instrument will be as carefully designed . . . as precisely built . . . as rigidly tested . . . as they have *always* been. And many models will be improved by our experience in meeting and surpassing high Army and Navy standards.

Filmo Companion 8mm Camera

Filmo Auto Master 16mm Camera

Filmo 70DA 16mm Camera

Filmo Master "400" 8mm Projector

Filmo Showmaster 16mm. Projector

Products combining the sciences of OPTics • electrONics • mechanICS

Buy MORE War Bonds

Bell & Howell Company
1848 Larchmont Ave., Chicago 13
Please send complete Filmosound Library Catalogs.

Name

Address

City State

PRECISION-MADE BY

Bell & Howell